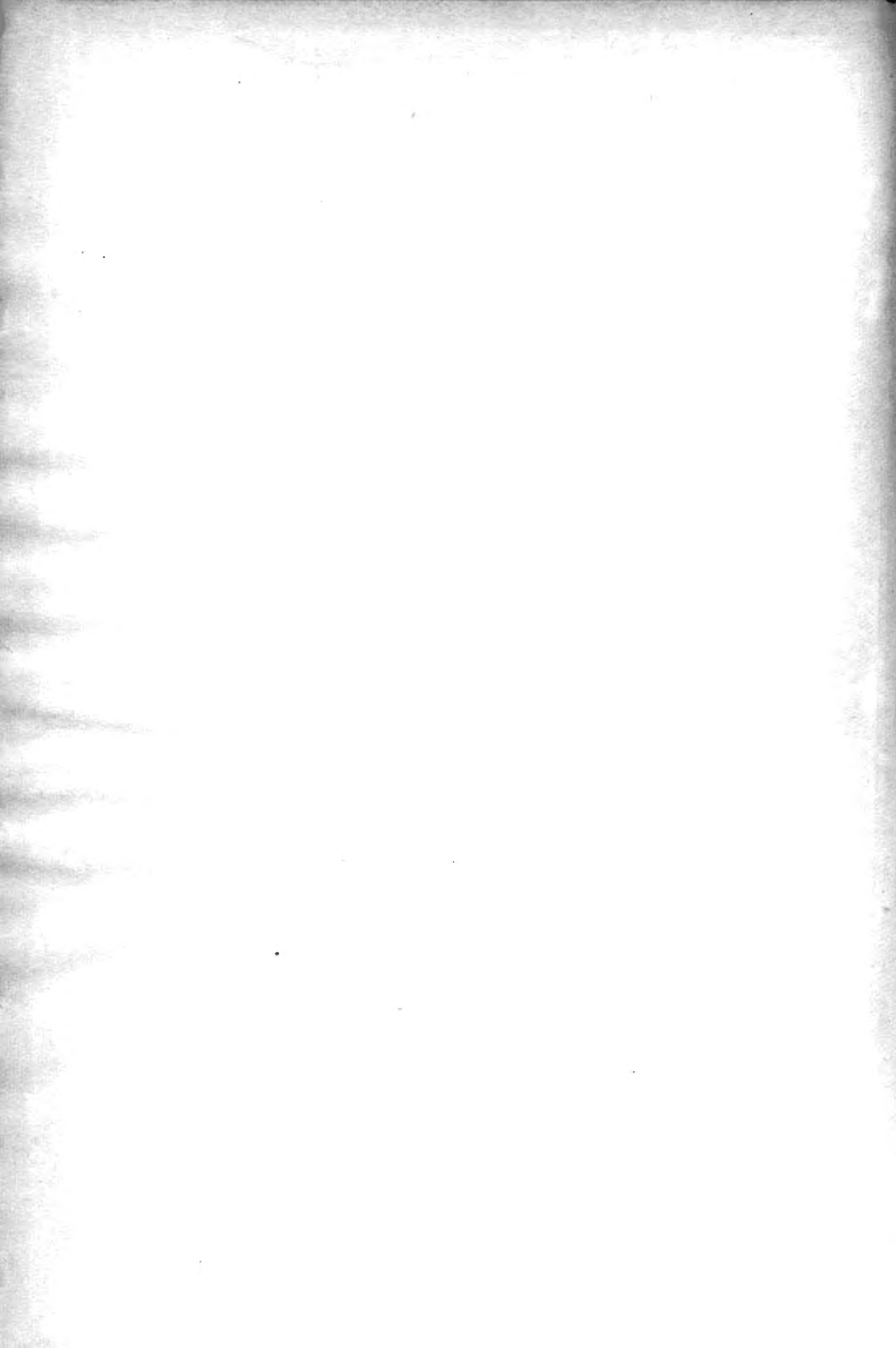


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| αFinney, James, Esq., 20, Angle Bank, Bolton ..           | 0 | 10 | 6  |
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| αHearn, Rev. L. R., Astley Bridge Vicarage, Bolton ..     | 0 | 10 | 6  |
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|                                |    |     |     |
|--------------------------------|----|-----|-----|
| August 8th.—By cash .. .. .    | £3 | 3s. | 0d. |
|                                | £  | s.  | d.  |
| αDarwin, Francis, Esq. .. .. . | 2  | 2   | 0   |
| αGood, John G., Esq. .. .. .   | 1  | 1   | 0   |

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|                                  |    |     |     |
|----------------------------------|----|-----|-----|
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|                                  | £  | s.  | d.  |
| αBaxendall, Walter, Esq. .. .. . | 1  | 1   | 0   |
| αBirch, Rev. W. F. .. .. .       | 1  | 1   | 0   |
| αChorlton, Thomas, Esq. .. .. .  | 0  | 10  | 6   |
| αLees, Miss .. .. .              | 0  | 10  | 6   |

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|                                       |            |
|---------------------------------------|------------|
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| <i>a</i> Hodgkin, Thos., Esq. .. .. . | £1 1s. 0d. |

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|                                      |             |
|--------------------------------------|-------------|
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|  |                   |
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| July 6th.—By cash .. .. .  | £5 6s. 8d.        |
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| <i>a</i> Griffin, Frederic, Esq. .. .. .   | 0 10 6            |
| <i>a</i> Rawlence, Ernest, Esq. .. .. .  | 0 10 6            |
| <i>a</i> Short, Rev. George .. .. .  | 0 10 6            |
| <i>a</i> Wilson, Rathmell G., Esq. .. .. .   | 0 10 6            |
| May 22nd.—Proceeds of lecture delivered by Col. Sir<br>Chas. W. Wilson, K.C.B., R.E., at Salisbury .. .. . | 2 14 2            |

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|                                     |                      |
|-------------------------------------|----------------------|
| Donations and Subscriptions .. .. . | £ s. d.<br>83 1 0    |
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|                                     | <hr/> £426 9 5 <hr/> |

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(Received after going to press.)

|  |                  |
|--|------------------|
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The Committee will be glad to communicate with gentlemen willing to help the Fund as Honorary Secretaries.

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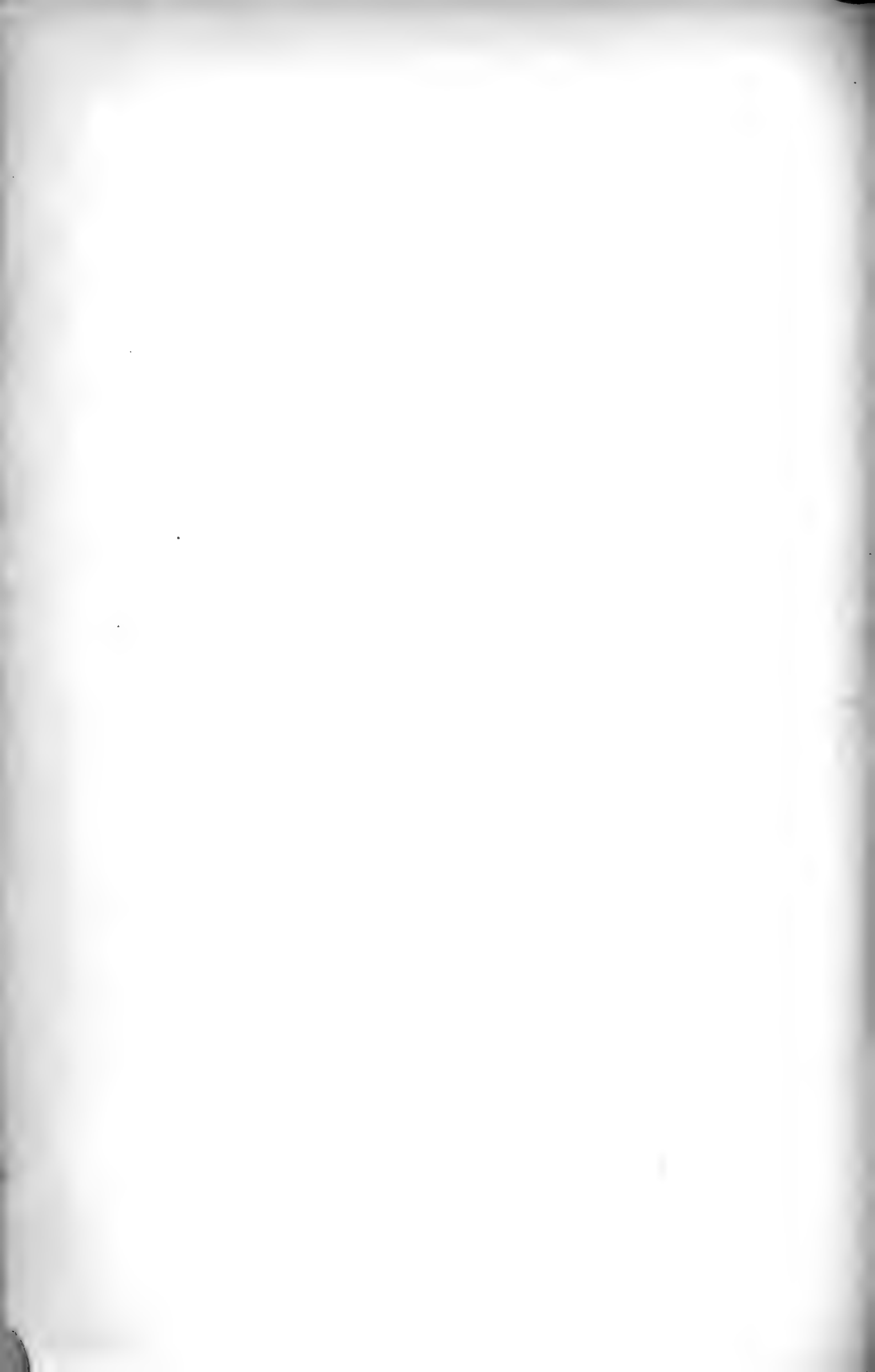
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## THE PALESTINE EXPLORATION FUND.

### LAST YEAR AND THIS.

THE year 1888 has not been fruitful of discoveries. On the other hand, it has been a year of very good work, and one that has enriched the bibliography of Palestine Research with much that is valuable and enduring.

- (1) Herr Conrad Schick has followed up and completed his account of the very interesting discoveries made in the Russian property to the east of the Church of the Holy Sepulchre. We have been in communication with the Russian Exploration Society, and have received from them the most gratifying assurances of assistance. It is possible that some of the opinions first advanced by Herr Schick upon this discovery may have to be modified. For example, he thinks that the granite columns found in the street Khan er-Zeit formed part of Constantine's Propylæum. Sir Charles Wilson, however, is of opinion that these columns probably belonged to the main street of Ælia Capitolina, which was decorated with columns as in the case of Samaria and other cities.
- (2) The line of the Second Wall has received no further investigation. But Herr Schick was absent on leave during the summer, and it is hoped that he may be able to resume his search during the present year.
- (3) As regards the Sidon Sarcophagi, we are still awaiting the promised work of Hamdi Bey upon them.
- (4) The great discovery of the year has been that of the Pool of Bethesda, and fully described in the *Quarterly Statement* for July, 1888. There seems to be very little doubt that we have here the ancient Pool itself.
- (5) A cave has been found in Jerusalem, at a depth of 49 feet 6 inches below the surface. It lies south-east of the Church of the Holy Sepulchre. The cave is to be cleared out and thoroughly examined.
- (6) Russian excavations at Jericho have proved the existence of former extensive buildings, on the site capitals, pillars, lintels, weapons, lamps, and jars, rings, &c., have been found.
- (7) Herr Schumacher has surveyed and planned the ruins of Abil, the Abila of the Decapolis, situated on the south bank of the Yarmûk. We shall give this Report to our Subscribers with the April or July number of the *Quarterly Statement*.
- (8) The narrative of the Botanical Expedition of Dr. Post to the Trans-Jordanic regions in the year 1886 was published in the October number of the *Quarterly Statement* for last year. The list of plants collected is a most valuable contribution to the Botany of the country.
- (9) Herr Schick has discovered a somewhat remarkable ruin on one of the sand dunes on the coast south of Jaffa. It is called Tell Yûnis, and is described in this number.

The Committee are pleased to announce that a sufficient number of names has been received for the three works—Conder's "Eastern Survey," Ganneau's "Archæological Drawings," and Hart's "Flora and Fauna of the Wady Arabah," to justify the commencement of the work. Major Conder's drawings are already executed and a portion of the work has been set up. The volume will probably be ready in March or April. Names should be sent in as soon as possible. No more than 500 will be printed, and the price, after 250 names have been received, will be raised from seven to twelve guineas.

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The Committee have added to their list of publications during the year Schumacher's "Survey of Jaulân." Upwards of 150 plans and sketches of the country were made for the work; the map which accompanies it contains 600 names as compared with 150 in the previous maps. The book is full of new and valuable information on the people and the country.

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The Committee have also to announce that by arrangement with Messrs. Bentley and Son, the new edition of the "History of Jerusalem," by Walter Besant and E. H. Palmer, can be obtained by subscribers, carriage paid, for 5s. 6d., by application to the Head Office only. The whole set (*see below*) of the Society's works, including this book, can be obtained by application to Mr. George Armstrong, for 37s. 6d., carriage paid. The "History of Jerusalem," which was originally published in 1871, and has long been completely out of print, covers a period and is compiled from materials not included in any other work, though some of the contents have been plundered by later works on the same subject. It begins with the siege by Titus and continues to the fourteenth century, including the Early Christian period, the Moslem invasion, the Mediæval pilgrims, the Mohammedan pilgrims, the Crusades, the Latin Kingdom, the victorious career of Saladin, the Crusade of Children, and many other little-known episodes in the history of the city and the country.

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The books now contained in the Society's publications comprise an amount of information on Palestine, and on the researches conducted in the country, which can be found in no other publications. It must never be forgotten that no single traveller, however well equipped by previous knowledge, can compete with a scientific body of explorers, instructed in the periods required, and provided with all the instruments necessary for carrying out their work. The books are the following:—

By Major Conder, R.E.—

- (1) "Tent Work in Palestine."—A popular account of the survey of Western Palestine, freely illustrated by drawings made by the author himself. This is not a dry record of the sepulchres, or a descriptive catalogue of ruins, springs, and valleys, but a continuous narrative full of observations upon the manners and customs of the people, the Biblical associations of the sites, the Holy City and its memories, and is based upon a six years' experience in the country itself. No other modern traveller has enjoyed the same advantages as Major Conder, or has used his opportunities to better purpose.

- (2) "Heth and Moab."—Under this title Major Conder provides a narrative, as bright and as full of interest as "Tent Work," of the expedition for the *Survey of Eastern Palestine*. How the party began by a flying visit to North Syria, in order to discover the Holy City—Kadesh—of the children of Heth; how they fared across the Jordan, and what discoveries they made there, will be found in this volume.
- (3) Major Conder's "Syrian Stone Lore."—This volume, the least known of Major Conder's works, is, perhaps, the most valuable. It attempts a task never before approached—the reconstruction of Palestine from its monuments. It shows what we should know of Syria if there were no Bible, and it illustrates the Bible from the monuments.
- (4) Major Conder's "Altaic Inscriptions."—This book is an attempt to read the Hittite Inscriptions. The author has seen no reason to change his views since the publication of the work.
- (5) Professor Hull's "Mount Seir."—This is a popular account of the Geological Expedition conducted by Professor Hull for the Committee of the Palestine Fund. The part which deals with the Valley of Arabah will be found entirely new and interesting.
- (6) Herr Schumacher's "Across the Jordan."
- (7) Herr Schumacher's "Jaulân."—These two books must be taken in continuation of Major Conder's works issued as instalments of the unpublished "Survey of Eastern Palestine." They are full of drawings, sketches, and plans, and contain many valuable remarks upon manners and customs.
- (8) The Memoirs of Twenty-one Years' Work.—A copy of this book is presented to every subscriber to the Fund who applies for it. The work is a popular account of the researches conducted by the Society during the past twenty-one years of its existence. It will be found not only valuable in itself as an interesting work, but also as a book of reference, and especially useful in order to show what has been doing, and is still doing, by this Society.
- (9) Herr Schumacher's Kh. Fahil. The ancient Pella(?), the first retreat of the Christians; with map and illustrations.
- (10) Names and Places in the Old and New Testament and Apocrypha, with their modern identifications, with reference to Josephus, the Memoirs, and *Quarterly Statements*.
- (11) Besant and Palmer's "History of Jerusalem," already described on p. 2.

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The Questions for making an inquiry into the manners and customs of the various peoples and tribes in Syria and the Desert, which were carefully prepared three years ago, and sent out to Palestine, have now begun to furnish the expected replies. They were interrupted by the absence of Dr. Post from Beyrout; he has now returned and has begun to send the answers.

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The translation, classification, and publication of these will form a great part of the work for the next year.

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The publications for the year 1889, besides those already mentioned, will include Schumacher's "Abila" and his "Southern Ajlûn." These will be presented to subscribers.

We also hope to publish in the autumn Mr. Guy le Strange's new book on Palestine according to the Arabic Geographers.

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Work at Jerusalem and elsewhere will be continued as opportunity may offer. Should the long-hoped for Firman be granted, the survey of Eastern Palestine will be renewed.

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It will be evident from the above that the Society is vigorous and full of work. At no time has the reputation of the Palestine Exploration Fund stood higher: its publications are in demand over the whole world; its achievements in the illustration of the Bible rise beyond comparison with those of any other institution or private traveller; and it has still an immense quantity of work before it. In those lands whose chief treasures are below the surface it is impossible to say what may be discovered, and at any moment. The Committee can only, however, make general plans, subject to alteration, from motives of expediency and necessity. The management of the Society is conducted on the most economical lines possible, and where there is extravagance of expenditure it is in the presentation to subscribers of the results obtained by their money.

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The Committee have resolved that Branch Associations of the Bible Society, all Sunday Schools in union with the Sunday School Institute, the Sunday School Union, and the Wesleyan Sunday School Institute, shall be treated as subscribers and be allowed to purchase the books and maps (by application only to the Secretary) at reduced price.

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The friends of the Society are earnestly requested to use the "Memoirs of Twenty-one Years' Work" as a means of showing what the work has been, and what remains to be done.

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Subscribers are very earnestly asked:—(1) To pay their subscriptions early in the year—say in January. (2) To pay them direct to Coutts and Co. by a banker's order. (3) If they would rather choose their own time, to send up their subscriptions without being reminded. The Clerical Staff of the Society is small; it is most desirable not to increase it; and if these simple requests are attended to a great saving of clerical labour, postage, and stationery is effected. For instance, there are, say, 3,000 subscribers. If every one of these waits to be reminded, and has to have a receipt sent to him, the Society has to spend £25 a year additional in postage, and to write 6,000 letters, merely to ask for and to acknowledge the receipt of the subscriptions.

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It has come to the knowledge of the Committee that certain book hawkers are representing themselves as agents of the Society. The Committee have to caution subscribers that they have no book hawkers in their employ, and that none of their works are sold by any itinerant agents.



Mr. Armstrong has prepared a list of the photographs belonging to the Society, arranged alphabetically according to those Bible names which are illustrated by views. This list is now ready. Those who wish for a copy may send in their names.

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The income of the Society, from September 19th to December 20th, inclusive, was—from subscriptions and donations, £318 19s. 0d.; from all sources, £1,011 13s. 8d. This amount includes a legacy of £500 from the late Mr. Robert Mackay Smith, of 4, Bellvue Crescent, Edinburgh. The expenditure during the same period was £769 6s. 6d. On December 20th, the balance in the Bank was £460 17s. 7d.

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Subscribers who do not receive the *Quarterly Statement* regularly are asked to send a note to the Secretary. Great care is taken to forward each number to all who are entitled to receive it, but changes of address and other causes give rise occasionally to omissions.

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It does not seem generally known that cases for binding the *Quarterly Statement* can be had by subscribers, on application to the office.

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The Committee have resolved upon issuing single sheets of the Great Map (Scale, one inch=one mile) at 2s. 6d. each to Subscribers.

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Subscribers are begged to note the following :—

1. Index to the *Quarterly Statement*, 1869–1880.
2. Cases for Herr Schumacher's "Jaulân."
3. Cases for the *Quarterly Statement*.

Each of these can be had by application to the office at 1s. each.

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Early numbers of the *Quarterly Statement* are very rare. In order to make up complete sets the Committee will be very glad to receive any of the numbers in the following years :—

1869, 1870. These are numbered I to VII.

1871–1876, 1881, 1883, 1885.

Odd numbers are worth little or nothing. Complete sets of the *Quarterly Statement* are priced in second-hand catalogues from £7 to £10 each.

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While desiring to give every publicity to proposed identifications and other theories advanced by officers of the Fund and contributors to the pages of the *Quarterly Statement*, the Committee wish it to be distinctly understood that by publishing them in the *Quarterly Statement* they neither sanction nor adopt them.

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The only authorised lecturers for the Society are—

- (1) Mr. George St. Clair, F.G.S., Member of the Anthropological Institute and of the Society of Biblical Archæology.

His subjects are :—

- (1) *The General Exploration of Palestine.*
- (2) *Jerusalem Buried and Recovered.*
- (3) *Buried Cities, Egypt and Palestine.*
- (4) *Buried Cities of Mesopotamia, with some account of the Hittites.*
- (5) *The Moabite Stone and the Pedigree of the English Alphabet.*

Address : Geo. St. Clair, Bristol Road, Birmingham, or at the Office of the Fund.

- (2) The Rev. Henry Geary, Vicar of St. Thomas's, Portman Square. His lectures are on the following subjects, and all illustrated by original photographs shown as "dissolving views :"—

*The Survey of Western Palestine, as illustrating Bible History.*  
*Palestine East of the Jordan.*  
*The Jerusalem Excavations.*  
*A Restoration of Ancient Jerusalem.*

- (3) The Rev. James King, Vicar of St. Mary's, Berwick. His subjects are as follows :—

*The Survey of Western Palestine.*  
*Jerusalem.*  
*The Hittites.*  
*The Moabite Stone and other monuments.*

- (4) The Rev. Thomas Harrison, F.R.G.S., Member of the Society of Biblical Archæology, 38, Melrose Gardens, West Kensington Park, W. His subjects are as follows :—

- (1) *Research and Discovery in the Holy Land.*
  - (2) *In the Track of the Israelites from Egypt to Canaan.*
  - (3) *Bible Scenes in the Light of Modern Science.*
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## “TELL YUNIS.”

THE Gardens at Jaffa extend  $1\frac{1}{2}$  miles south of the town, where a tract of sand hills begin, 7 miles long and nearly 4 miles broad.

This tract is a blank, bearing only the names of two tribes of wandering Arabs on the large Map of the Palestine Exploration Fund, sheets xiii and xvi.

In making an excursion close to the sea-shore to the south of Jaffa, my attention was arrested by a remarkable knoll named “Tell Yûnis,” worthy of insertion in the maps.

In going there one follows the road leading from Jaffa southwards, between the Gardens, having houses on both sides, some of which are old, but the greater number new, to the Saknet el-Jebalîyeh settlement on the hill.

About eight minutes further on, the road descends between sand hills to the sea-shore, and then for 3 miles further along the beach, having on the one side the sea, and on the other steep cliffs about 150 feet high, with a rocky crest in a straight line and uniform height, sometimes broken by small ravines. The road approaches a remarkable hill, having a steep slope in a straight line towards the sea; wide at the basement and narrow at the top, thus forming a regular pyramid. It stands isolated, as north of it is a deep depression, going down nearly to the level of the beach; and on the south there is a regular glen, with a kind of water-course.

As I had no instruments with me I was unable to take regular measurements, but made the notes simply by counting the paces. Its height is about 200 feet, and the top is of comparatively small extent, and is crowned with ruins almost buried in the sand; the line of the walls is, however, still recognisable.

The top was a platform, surrounded by walls of about 70 feet long and nearly 70 feet broad. A building once stood in the middle of it, measuring 45 feet from west to east in length, and 40 feet from north to south in breadth.

This building was divided into three apartments, the middle one being wider than the outer two, and very much resembling a small Basilica. A smaller platform, having ruins also, is in front of the east side of the platform, but on a lower level, which I consider to have been the entrance, having a tower with gate, &c., as from these ruins a kind of road descends through a small ravine, first in a northerly and then in a north-westerly direction to the foot of the hill.

Many fragments of coloured stones—some of which are polished, and of exceedingly white marble—besides many pieces of bricks and pottery, are lying about on the top and round the brow of the hill, giving the impression that the ruins were those of a costly building, and that excavations would give good results.

I hoped to find many interesting things, but did not see any hewn stones of any size, which were, perhaps, already taken away or buried in the sand. Those stones which once belonged to the walls were not hewn like those which are in the neighbourhood of Jaffa, but broken from the cliffs. Behind the hill is a kind of plain, the height of which is not many feet above the beach, and as there are indications that the sea once came nearer to the cliffs, and even to the foot of the hill, it is probable that the plain was a little bay or creek, and that the hill in question was at that time a peninsula.

The question now arises : what site is this, or what stood on the top of this hill ? Its name being "Tell Yûnis," Hill of Jonas, reminds one of the Prophet Jonas, who met with his fate in this neighbourhood.

That a temple, church, or any other monument may have been erected to his memory, we cannot say. There are several sites dedicated to this prophet, leaving out the one at the Euphrates. Major Conder, in the *Memoirs* ("Special Papers," p. 295), speaks of *four* in this country : one in Meshed, where his tomb was shown at an earlier period ; one south of Jaffa, on the south bank of the River Sukereir, near the sea, and 13 miles to the south of the hill in question, or 17 miles south of Jaffa (about which Major Conder remarks, "probably the traditional spot where the prophet was left by the whale"); the third at Hûlhûl, near Hebron ; and the fourth at Sarepta, near Tyre. The one now found would be the fifth.

This newly discovered hill is the property of a native at Jaffa, who wishes to sell it. Several Europeans went there, but hitherto no purchase was effected.

C. SCHICK.

*Jerusalem, November 29th, 1888.*

## IMPROVEMENT OF ROADS IN PALESTINE.

MUCH zeal on the part of the Government may be observed in the last two or three years for making roads in Palestine.

The existing one, from Jaffa to Jerusalem, has been much improved lately, and the work is still going on.

Not only the line itself is improved, but in many places new and better lines have been made. There are three chief places especially in which such improvements were made :—

1st. The Serpentine line, going down the steep descent into the Kulonieh Valley, west of Jerusalem, was abandoned, and an entirely new line made north of it, on the northern brow of the large valley of "W. Beit Hannîna" and "Kulonieh." The descent now begins at the second watch-tower, and passes near the village of Lifta, in a regular descent of 5 in a 100, along the brow of these barren hills to where it joins the old road, near the new and handsome bridge at Kulonieh. It is

a pity this road was made too narrow, as in the event of two carriages meeting at full speed, collisions would probably ensue.

On this account they are about to widen it, breaking away the rocks, and building parapet walls on the outer edge wherever it is necessary. The distance traversed is somewhat longer, but is proportionally easier.

Some alterations were made on the right side of the valley towards "Küstûl," but of minor importance, but at the ridge the bad part will still remain unless a tunnel about 800 feet long is made.

2nd. The second improvement is at Kuryet el-'Enab, where the ascent was always hard work, and driving down it dangerous. It is in some degree longer, but with a gentle descent; also on the other side of the ridge, towards "Saris," it was made better and with more skill even at Saris itself.

3rd. The third is at "Latrôn;" the old line went over the ridge of the Latrôn Hill itself. The new road follows the valley without any rise, and at the same time no longer than the other.

It joins the old road one mile west of the Latrôn Hotel—a misfortune for that establishment—the new road not approaching it. The proprietor must do something to attract travellers.

In the Plain Country several improvements were made, but unhappily the steep ascent at Kubab is still remaining and not improved.

One of the decaying watch-towers near Ramleh was removed and put nearer the road. Through the Gardens at Jaffa the road was made much wider.

The road from Jerusalem to Hebron is finished so that carriages are now going there. At some places the old route was abandoned, and new and better ones made.

The road from Jaffa to Nablus will also be made; some parts being already done.

At Jerusalem the road outside the City, from its north-western corner eastwards along the northern town wall down to the Garden of Gethsemane is now in course of reconstruction, and, when finished, will be carried on to Jericho and the Jordan.

C. SCHICK.

*Jerusalem, December 5th, 1888.*

## SOME JERUSALEM NOTES.

On the plan of Jerusalem, A.D. 1187, which is given in Professor Hayter Lewis's recent work on the holy places of that city, the "House of the Holy Ghost" is marked. It may not be generally known that a house called by that name still occupies the same position. It is in the western part of the Jewish quarter, and is, or was, inhabited by Jews. The House of Annas appears to be now included in the precincts of the Armenian Convent, and is probably part of the Nunnery and Girls' School known as Deir ez Zeitûny. The Church of St. James is repre-

sented by the magnificent Cathedral of the Armenians, and St. James the Less still exists, in a tolerable state of preservation, in premises adjoining those of the English Church. The Church or Convent of St. Thomas was somewhere near the site now occupied by the Synagogues of the Spanish Jews. I have often searched for Christian remains in that locality under the impression that these buildings, perhaps, occupy an ancient Christian site, but without success, and can only suppose that the chapel or oratory, the apse of which still exists in perfect preservation, in the Street of the Meidan, is part of the establishment of St. Thomas. At the bottom of this street, turning a little to the left, we come to the open space called El Meidan, in which are extensive remains of the ancient Hospice of the German Knights. The ruins of the principal buildings have been turned into dwelling-houses, inhabited by Jews and Moslems, and one part is known as *casa derocada*, the "ruined house." It occupies a prominent and striking position opposite the establishment of the Templars on Mount Moriah, with only the deep central valley (Tyropeon) between. On the western side of the Meidan a well of slightly saline water exists, and there is another two or three hundred yards further west, making three (or four) known to me in the Holy City. The Church of St. Gilles is on this plan placed on the southern side of the street leading to the Temple, but the author of the "*Citez de Jerusalem*" states that the street of the Germans was on the right-hand side of a person going towards the Temple, and the Monastery of St. Gilles on the left. On the left-hand side of the steep descent leading to the Valley street which comes down from the Damascus Gate is a house belonging to Moham-medans, but now tenanted by Jews, in which are columns and capitals which indicate that a Christian building formerly stood on the spot; and this could be no other than St. Gilles. The Church of St. Ann is well known to everyone under the same name at the present day. St. Magdalen is indicated by the ruins existing to the north-west of St. Ann, in the place called Mamuniyeh, as pointed out by Sir Charles Wilson in his notes to the Ordnance Survey. The Chapel of the Flagellation still remains and is called by its old name, whilst St. Peter ad Vincula, from the situation indicated on the plan, can hardly be other than the Deir el 'Adas now in possession of the Greek Church. The chapel marked to the east of St. Stephen's (Damascus) Gate is apparently that now turned into a mosque under the name Malawiye. The Church at the south-west corner of the Hospital of St. John still exists, and of course the Church of the Holy Sepulchre, so that the sites of all the ecclesiastical buildings marked in this plan may be readily identified at the present day.

I think it is a mistake to suppose that there are no ancient families of Jews in Jerusalem. Jews were there for centuries before the expulsion from Spain, and some still possess, or did a few years ago possess, hereditary freehold property in the north-east quarter of the city, the ancient Juiverie, which they allege to have come down to them from their remote ancestors. It is hard to make out when the Jews began to dwell beyond the limits of the mediæval Jewry. It is not likely they could have left



MONTHLY METEOROLOGICAL TABLE DEDUCED FROM OBSERVATIONS TAKEN AT SARONA BY HERR J. DREHER IMMEDIATELY NORTH OF THE GREAT ORANGE GROVES OF JAFFA, SYRIA, 1½ MILE FROM THE SEA SHORE, ON SANDY SOIL, AND ABOUT 50 FEET ABOVE SEA-LEVEL. LATITUDE 32° 4' N. LONGITUDE 34° 47' E.

By JAMES GLAISHER, F.R.S.

| Months, 1882.       | Pressure of Atmosphere in Month.<br>Corrected to 32° Fahrenheit. |         | Temperature of the Air in Month. |          |         |        |                      |                     |                   |       |           |           | Mean Reading at 9 a.m. |                          |                                | Vapour, 9 a.m.                             |                        |    | Degree of Humidity. | Weight of a Cubic Foot of Air. | Wind.   |         |         |                       |                                  |                   |         |      | Mean Amount of Cloud. | Rain.      |  |
|---------------------|--|---------|----------------------------------|----------|---------|--------|----------------------|---------------------|-------------------|-------|-----------|-----------|------------------------|--------------------------|--------------------------------|--|------------------------|----|---------------------|--------------------------------|---------|---------|---------|-----------------------|----------------------------------|-------------------|---------|------|-----------------------|------------|--|
|                     | Highest.   | Lowest. | Mean.                            | Highest. | Lowest. | Range. | Mean of all Highest. | Mean of all Lowest. | Mean daily Range. | Mean. | Dry Bulb. | Wet Bulb. | Dew Point.             | Elastic Force of Vapour. | Weight in a Cubic Foot of Air. | Additional Weight required for Saturation. | Relative Proportion of |    |                     |                                |         |         |         | Calm, or nearly Calm. | Number of Days on which it fell. | Amount Collected. |         |      |                       |            |  |
|                     |  |         |                                  |          |         |        |                      |                     |                   |       |           |           |                        |                          |                                |  | N.E.                   | E. |                     |                                | S.E.    | S.      | S.W.    |                       |                                  |                   | W.      | N.W. |                       |            |  |
| January .. ..       | 30·220   | 29·855  | 65                               | 30·060   | 72·0    | 34·0   | 38·0                 | 61·1                | 43·7              | 17·4  | 52·4      | 52·1      | 48·4                   | 44·6                     | grs. 295                       | grs. 3·4                                   | grs. 1·0               | 76 | 544                 | 4                              | 2       | 3       | 13      | 1                     | 0                                | 1                 | 7       | 4·8  | 10                    | ins. 4·37  |  |
| February .. ..      | 30·249   | 29·706  | 43                               | 30·000   | 81·0    | 37·0   | 41·0                 | 55·7                | 44·0              | 11·7  | 49·8      | 52·2      | 49·2                   | 46·1                     | 313                            | 3·6  | 0·9                    | 80 | 542                 | 3                              | 4       | 5       | 9       | 2                     | 1                                | 1                 | 7       | 4·8  | 10                    | 7·22       |  |
| March .. ..         | 30·132   | 29·631  | 01                               | 29·930   | 82·0    | 37·0   | 45·0                 | 68·8                | 47·1              | 21·7  | 58·0      | 62·8      | 57·0                   | 52·1                     | 390                            | 4·3  | 2·0                    | 68 | 529                 | 0                              | 1       | 5       | 9       | 4                     | 3                                | 0                 | 9       | 4·1  | 5                     | 1·04       |  |
| April .. ..         | 30·114   | 29·581  | 33                               | 29·797   | 89·0    | 45·0   | 44·0                 | 72·8                | 51·9              | 20·9  | 62·4      | 66·3      | 60·7                   | 56·2                     | 452                            | 5·0  | 2·3                    | 71 | 524                 | 0                              | 0       | 3       | 3       | 12                    | 3                                | 2                 | 6       | 5·5  | 11                    | 4·17       |  |
| May .. ..           | 30·017   | 29·609  | 08                               | 29·840   | 88·0    | 47·0   | 41·0                 | 75·3                | 55·4              | 19·9  | 65·3      | 71·5      | 64·3                   | 58·8                     | 498                            | 5·4  | 3·0                    | 64 | 519                 | 0                              | 1       | 0       | 3       | 13                    | 8                                | 5                 | 0       | 3·2  | 3                     | 0·63       |  |
| June .. ..          | 29·995   | 29·684  | 11                               | 29·806   | 84·0    | 51·0   | 33·0                 | 79·6                | 59·3              | 20·3  | 69·5      | 76·6      | 68·9                   | 63·4                     | 586                            | 6·3  | 3·6                    | 65 | 513                 | 0                              | 2       | 0       | 1       | 7                     | 14                               | 4                 | 0       | 1·4  | 0                     | 0·00       |  |
| July .. ..          | 29·798   | 29·545  | 53                               | 29·689   | 87·0    | 60·0   | 27·0                 | 84·4                | 65·5              | 18·9  | 74·9      | 81·8      | 73·8                   | 68·5                     | 696                            | 7·5  | 4·2                    | 65 | 505                 | 0                              | 4       | 0       | 0       | 24                    | 2                                | 1                 | 0       | 3·2  | 0                     | 0·00       |  |
| August .. ..        | 29·801   | 29·630  | 71                               | 29·705   | 89·0    | 64·0   | 25·0                 | 86·6                | 68·7              | 17·9  | 78·6      | 83·0      | 74·3                   | 68·5                     | 696                            | 7·4  | 4·6                    | 61 | 504                 | 0                              | 1       | 0       | 1       | 7                     | 17                               | 4                 | 0       | 3·7  | 1                     | 0·35       |  |
| September .. ..     | 29·949   | 29·712  | 37                               | 29·803   | 92·0    | 57·0   | 35·0                 | 87·2                | 66·3              | 20·9  | 76·8      | 82·8      | 74·4                   | 68·8                     | 703                            | 7·5  | 4·4                    | 64 | 506                 | 0                              | 0       | 0       | 3       | 14                    | 5                                | 2                 | 3       | 2·5  | 0                     | 0·00       |  |
| October .. ..       | 29·983   | 29·729  | 51                               | 29·771   | 92·0    | 53·0   | 39·0                 | 83·3                | 60·6              | 22·7  | 72·0      | 77·7      | 66·5                   | 58·8                     | 496                            | 5·4  | 4·8                    | 52 | 512                 | 0                              | 4       | 2       | 0       | 10                    | 2                                | 3                 | 6       | 2·3  | 5                     | 0·44       |  |
| November .. ..      | 30·073   | 29·773  | 00                               | 29·919   | 93·0    | 46·0   | 47·0                 | 76·5                | 56·0              | 20·5  | 66·3      | 69·3      | 61·9                   | 56·1                     | 451                            | 5·0  | 2·9                    | 63 | 523                 | 3                              | 3       | 2       | 0       | 15                    | 0                                | 0                 | 6       | 4·7  | 2                     | 0·29       |  |
| December .. ..      | 30·153   | 29·722  | 31                               | 29·953   | 77·0    | 40·0   | 37·0                 | 68·9                | 50·9              | 18·0  | 59·9      | 60·7      | 55·7                   | 51·3                     | 379                            | 4·2  | 1·7                    | 71 | 532                 | 2                              | 1       | 4       | 0       | 10                    | 4                                | 0                 | 9       | 5·2  | 10                    | 3·58       |  |
| Means .. ..         | 30·010   | 29·781  | 59                               | 29·856   | 85·5    | 47·6   | 37·9                 | 75·0                | 55·8              | 19·2  | 65·5      | 69·7      | 62·9                   | 57·8                     | 486                            | 5·4  | 3·0                    | 67 | 521                 | Sum. 12                        | Sum. 23 | Sum. 24 | Sum. 42 | Sum. 119              | Sum. 59                          | Sum. 23           | Sum. 47 | 4·0  | Sum. 62               | Sum. 22·09 |  |
| Number of Column .. | 1  | 2       |                                  | 4        | 5       | 6      | 7                    | 8                   | 9                 | 10    | 11        | 12        | 13                     | 14                       | 15                             | 16   | 17                     | 18 | 19                  | 21                             | 22      | 23      | 24      | 25                    | 26                               | 27                | 28      | 29   | 30                    | 31         |  |



OF THE GROM TH  
N., LONG

| Weight of a Cubic Foot of Air. |      | Sam. | Amount Collected |
|--------------------------------|------|------|------------------|
|                                |      | N    |                  |
|                                | grs. |      | ins.             |
|                                | 541  |      | 4.37             |
|                                | 542  |      | 7.22             |
|                                | 529  |      | 1.04             |
|                                | 524  |      | 4.17             |
|                                | 519  |      | 0.63             |
|                                | 513  |      | 0.00             |
|                                | 505  |      | 0.00             |
|                                | 501  |      | 0.35             |
|                                | 506  |      | 0.00             |
| 2                              | 512  |      | 0.44             |
| 3                              | 523  |      | 0.29             |
| 1                              | 532  |      | 3.58             |
| 7                              | 521  | S    | Sum.<br>22.09    |
| 8                              | 19   |      | 31               |

it until after the Mohammedan reoccupation, when many Christian dwellings were already become ruinous and deserted ; yet Benjamin of Tudela, *circa* 1165, found two hundred dwelling “in one corner of the city, *under the Tower of David*.” Perhaps these were only a portion of the Jewish population, allowed to live in that locality for the convenience of carrying on their occupation of dyeing. The origin of the singular custom of *handing over to the Jews the keys of the city for a few hours on the accession of a new Sultan* is also shrouded in much obscurity. It is said to be connected with the Rabbinic laws relating to the Sabbath boundary עֶרֶב, *Erüb*, and the opinion of the Rabbis of Jerusalem is that it dates from “the time of the Talmud.” They affirm that after the Babylonian Captivity (!) the Jews of Jerusalem always endeavoured to obtain the keys of the city gate when a new monarch came to the throne, and to place them in the hands of the Chief Rabbi for a short time, the object being to acquire possession of the city by right of purchase, as it were (for they always had to pay for the privilege), in order that they might legally allow their people to pass and carry objects on the Sabbath from house to house and street to street without infringing the law of Exod. xvi, 29. A friend informs me that on the accession of the present Sultan the Jews applied to the Pasha for the keys and were refused, that they then succeeded in obtaining them from the military authorities who have them in charge, and that the Pasha, who was very angry when he found out what had occurred, was pacified on its being explained that the custom was merely a religious ceremony. Probably the usage arose after the expulsion of the Crusaders, and when the Jews began to spread beyond the limits of their old confined quarter. Modern Eastern Rabbis, like the Rabbis who wrote the Talmud, frequently display a lofty disdain of historical accuracy, and by “after the Babylonian Captivity” we may understand the much later period when Jews of the dispersion began to turn from Babylon westward, and many doubtless took up their residence in Jerusalem.

THOMAS CHAPLIN, M.D.

## METEOROLOGICAL OBSERVATIONS.

SARONA 1882.

THE numbers in column 1 of this table show the highest reading of the barometer in each month ; of these, the highest are in winter, and the lowest in the summer months. The maximum for the year was in February, viz., 30.249 ins. ; in both the years 1880 and 1881 the maximum was in January. In column 2, the lowest in each month are shown ; the minimum, 29.545 ins., was in July ; in 1880 the minimum was in April, and in 1881 in February ; the range of readings in the year was 0.704 inch, being about the same as in the two preceding years. The numbers in the 3rd column show the range of reading in each month ; the smallest was in

August, viz., 0·171 inch, and the largest in February, being somewhat more than half an inch, the least and greatest ranges in the two preceding years being about the same values. The numbers in the 4th column show the mean monthly pressure of the atmosphere; the greatest, 30·060 ins. was in January, and the smallest, 29·689 ins. in July; in the years 1880 and 1881 the greatest was in January, as in this year, the smallest in 1880 was in July, and in 1881 in August.

The highest temperature of the air in each month is shown in column 5. The highest in the year was 93°, but which high point was not reached till November 1st; in 1880, the maximum temperature of the year was 103°, on May 23rd, and in 1881 the maximum temperature was 106°, on August 27th. The first day in the year 1882 the temperature exceeded 90° was on the 24th of September, and only on one other day in the month it rose to 90°; in October there were four days when the temperature reached and exceeded 90°; and in November two such days, the highest 93°, took place on the 1st; therefore the temperature reached and exceeded 90° on only eight days in the year; in the year 1880 the temperature exceeded 90° on 36 days, and in 1881 the temperature rose to and exceeded 90° on 27 days.

The numbers in column 6 show the lowest temperature of the air in each month; in January it was as low as 34° on the 30th, and below 40° on eight other nights in the month; in February it was below 40° on four different nights, and in March on one night; therefore the temperature was below 40° on 14 nights in the year; in the year 1880 the temperature was as low as 32° on two nights in January and one in February; and below 40° on 13 other nights, and in 1881 it was below 40° on only two nights; the lowest experienced was 39° on the 6th and 7th of December. The yearly range of temperature was 59°, the range in 1880 was 71°, and in 1881 was 67°. The range of temperature in each month is shown in column 7, and these numbers vary from 25° in August to 47° in November; in 1880 these numbers vary from 25° in August to 53° in both April and May, and in 1881 from 29° in July and September to 51° in May.

The mean of all the highest by day, of the lowest by night, and of the average daily ranges of temperature, are shown in columns 8, 9, and 10, respectively. Of the high day temperature, the lowest was in February, 55°·7; and the highest in September, 87°·2. Of the low night temperature the coldest, 43°·7, took place in January, and the warmest, 68°·7, in August. Both the high day temperature and the low night temperature were very low throughout the year. The mean daily range of temperature in each month are shown in column 10, the smallest was in February, 11°·7, and the largest in October 22°·7.

In column 11, the mean temperature of each month, as found from observations of the maximum and minimum thermometers only are given, the month of the lowest temperature was February, 49°·8; in 1880 the month of the lowest temperature was January, 50°·7; and in 1881 was February, 56°·2. The highest was August, 78°·6; in 1880 and 1881 the months of the highest was also in August, as in this year, and the numbers

were  $79^{\circ}$  and  $80^{\circ}\cdot 1$  respectively. The mean temperature for the year was  $65^{\circ}\cdot 5$ , and of the preceding years, viz., 1880 and 1881, were  $66^{\circ}\cdot 4$  and  $66^{\circ}\cdot 7$  respectively; the year was cold, and the months of January, February, May, and June were remarkably cold.

The numbers in columns 12 and 13 are the monthly means of a dry and wet bulb-thermometer, taken daily at 9 a.m., and in column 14 the monthly temperature of the dew-point, or that of the temperature at which dew would have been deposited. The elastic force of vapour is shown in column 15, and in column 16 the water present in a cubic foot of air; in January and February this was as small as  $3\frac{1}{2}$  grains, whilst in July, August, and September it was as large as  $7\frac{1}{2}$  grains. The numbers in column 18 show the degree of humidity, saturation being considered 100; the smallest number in this column was in October, and the largest in February. The weight of a cubic foot of air under its pressure, temperature, and humidity, at 9 a.m., is shown in column 19.

The most prevalent wind in January was S., and the least prevalent winds were N. and W. In February the most prevalent was S., and the least were W. and N.W. The most prevalent in March was S., and the least were N., N.E., and N.W. In April the most prevalent was S.W., and the least prevalent were N.E. and E. In May the most prevalent were S.W., and W., and the least prevalent were N.E. and S.E. In June the most prevalent were S.W. and W., and the least were N.E. and S.E. In July the most prevalent was S.W., and the least were S., S.E., N., and its compounds. In August the most prevalent was W., and the least E. and N.E. In September the most prevalent was S.E., and the least was E. and its compounds. In October the most prevalent was S.W., and the least was N.E. In November the most prevalent was S.W., and the least were N. and N.W., and in December the most prevalent was S.W., and the least were S. and S.W.

The most prevalent wind for the year was S.W., which occurred on 119 times during the year; of which 24 were in July, 15 in November, and 14 in September; and the least prevalent wind for the year was N.E., which occurred on only 12 times during the year, of which 4 were in January, 3 in both February and November, and 2 in December.

The numbers in column 29 show the mean amount of cloud at 9 a.m.; the month with the smallest amount is June, and the largest February. Of the cumulus, or fine weather cloud, there were 81 instances in the year; of these there were 18 in July, 16 in August, and 15 in September, and 3 only both in January and February. Of the nimbus, or rain cloud, there was 90 instances in the year, of which 16 took place in February, 13 in January, and 12 in both May and December, and 4 only from July to October. Of the cirrus, there were 44 instances in the year. Of the stratus there were 40 instances. Of the cirro-cumulus there were 32 instances. Of the cirro-stratus there were 21 instances in the year, and there were 57 instances of cloudless skies, of which 11 were in October, and 8 in both January and June.

## 14 THE HOLY SEPULCHRE AND THE DOME OF THE ROCK.

The largest fall of rain for the month in the year was in February, 7·22 ins., of which 1·02 inch fell on the 5th, 0·92 inch on the 10th, and 0·89 inch on the 4th. No rain fell from May 25th till October 20th, with the exception of one day, which was August 10th, when 0·35 inch fell, and so making two periods of 76 and 70 consecutive days without rain. In the year 1880, no rain fell from the 2nd of May till the 18th of October, making a period of 168 consecutive days without rain; and in 1881 no rain fell from April 20th to November 6th, making a period of 189 consecutive days without rain. The fall of rain in the year was 22·09 ins., being 6·59 ins. less than in 1880, and 4·60 ins. more than in 1881. The number of days on which rain fell was 62, while in 1880 rain fell on 66 days, and in 1881 on 48 days during the year.

JAMES GLAISHER.

## THE HOLY SEPULCHRE AND THE DOME OF THE ROCK.

THE value of the "Palestine Pilgrims' Texts" are already becoming evident in many ways, and the intentions of those who projected their publication are being fully realised. Whoever reads Professor Hayter Lewis' admirable work on "The Holy Places of Jerusalem," will see the advantages to be derived from the material they contain. I wish here to acknowledge my indebtedness to them upon a point of some importance connected with the topography of Jerusalem. As far back as January, 1879, a short article of mine appeared in the *Quarterly Statement* entitled "Transference of Sites." In that article will be found described what seemed to me to be some very marked points of resemblance between the Holy Sepulchre and the Dome of the Rock, and the strong probability that the one structure was copied from the other. In Mukaddasi, an Arabic author, whose date is given as about 985 A.D., lately published by the Palestine Pilgrims' Text Society,<sup>1</sup> I find the following passage. The author is describing the Mosque at Damascus—"Now one day I said, speaking to my father's brother, 'O, my uncle, verily it was not well of the Khalîf al Walîd to expend so much of the wealth of the Muslims on the Mosque at Damascus. Had he expended the same on making roads, or for making caravanserais, or in the restoration of the fortresses, it would have been more fitting and more excellent of him.' But my uncle said to me in answer, 'O, my little son, you have not understanding! Verily Al Walîd was right, and he was prompted to do a worthy work. For he beheld Syria to be a country that had long been occupied by the Christians, and he noted herein the beautiful churches still belonging to them, so enchantingly fair, and so

<sup>1</sup> Translated from the Arabic and annotated by Guy Le Strange.

renowned for their splendour : even as are the Kumâmah<sup>1</sup> [the church of the Holy Sepulchre] and the churches of Lydda and Edessa. So he sought to build for the Muslims a mosque that should prevent their regarding these, and that should be unique and a wonder to the world. And in like manner is it not evident how the Khalif, 'Abd al Malik, *noting the greatness of the Dome of the Kumâmah and its magnificence, was moved lest it should dazzle the minds of the Muslims, and hence erected, above the rock, the Dome which now is seen there.*"<sup>2</sup> The italics in the above are here given to show the words which apply to the case in point.

Mr. Fergusson's theory was that the Dome of Rock was the original Holy Sepulchre, and that its transference to its present site took place in the eleventh century ; Mukaddasi writes in the tenth century, and says that the Dome of the Rock was built as a rival to the Holy Sepulchre.

The quotation from Mukaddasi disposes at once of this part of Mr. Fergusson's theory.

Mukaddasi's words do not affirm that the one building was copied from the others, but they permit of that inference. This inference is justified, I think, from the resemblance between the two monuments. Before the marble was built round the Holy Sepulchre, to form the chapel as we see it now, the rock must have stood up under the dome, thus presenting a striking resemblance to the Sakhra. Having realised this identification, it appeared to me, from the arrangement of the pillars supporting the dome of the sepulchre, of which we have the original design still remaining on the western side, that the number was probably twelve, the same as there is under the Dome of the Rock. This was a lucky guess on my part, but I am able now to confirm it by a number of references. The earliest is from Eusebius ; he mentions the "rock standing out erect and alone on a level land, and having only one cavern within it ;"<sup>3</sup> and also that the dome "was encircled by twelve columns [accord-

<sup>1</sup> Al Kumâmah, literally "The Dunghill." This is a designed corruption on the part of the Muslims of "Al Kayâmah"—"anastasis," the name given to the Church of the Resurrection (the Holy Sepulchre) by the Christian Arabs.

<sup>2</sup> Page 22.

<sup>3</sup> Willibald describes the rock at the time of his visit, A.D. 722 : "The rock is now above ground, square at the bottom, but tapering above, with a cross on the summit." Arculf, who is about the same date as Willibald, says that "the whole is covered with choice marble to the very top of the roof, which is adorned with gold, and supports a large golden cross." Arculf may possibly have meant that it was the inside that was covered with marble, otherwise it is difficult to reconcile these two authorities. Antonius Martyr, date 560-570, describes—"The tomb itself, in which the body of Our Lord Jesus Christ was laid, is cut out of the natural rock." These all indicate that the rock was visible in these early days. In the present day the whole tomb outside and inside is so covered with marble that no ordinary pilgrim would be aware of the existence of the rock.

ing to the number of the Apostles of our Saviour], having their capitals embellished with silver bowls of great size, which the Emperor himself presented as a splendid offering to his God." Following this we have Arculf's testimony—"the round church of our Saviour's Resurrection, encompassed with three walls, and supported by twelve columns." In the *Palestine Pilgrims' Texts* we have now the account by the Abbot Daniel,<sup>1</sup> who visited Jerusalem 1106-7, and he mentions the "twelve monolithic columns." In addition to these authorities we have evidence that these columns still exist; in 1867, while some repairs were being made, the Austrian Consul saw one of them; it was much damaged by the action of fire, which was probably the reason that they were all built up, and now present the form of square piers.

For the present, or at least till better evidence may be found, Mukaddasi's testimony has to be accepted. Still, the knowledge we obtain from him leaves much unexplained. A natural question at once presents itself as to why Abd al Malik, or his architects, selected a tomb as their model for the Dome of the Rock. More than one guess presents itself to the mind, but data is wanting to support them. There is a faint tradition which locates the tomb of Solomon at the spot; this could scarcely have been the motive, because if it had the name of such a celebrity would have in all probability come down to us, in a very prominent form, connected with the building. It might have been that as there was a Sacred Rock to build over, Abd al Malik's architects merely copied the Holy Sepulchre, because it also had a rock. The notion that I feel most inclined to regard as having produced the influence was that, the Holy Sepulchre being looked upon as the "centre of the world," and as the Mohammedans considered the Sakhra as the centre, they constructed a rival dome to eclipse the other. Much might be said in favour of this explanation, and yet, after all that could be brought forward, I confess that it would lead to nothing more than a theory.

The resemblance between the two buildings is most striking; in both cases there is a rock with a cave in each; over this each has a dome, supported by twelve columns. The columns of the Dome of the Rock are said to represent the twelve sons of Jacob; those in the Holy Sepulchre are according to the twelve Apostles. The architecture of the two is very different; it is only in the arrangement of the two buildings that similarity is found. This similarity harmonises with the statement of Mukaddasi. It also confirms one of Mr. Fergusson's conclusions, which he insisted strongly upon—namely, that the Dome of the Rock was a structure in the form of an Oriental tomb. That it was a tomb we have as yet no evidence; no tradition has as yet turned up that anyone has been buried in the cave. The position of Solomon's tomb is not located in the cave, but at a point near to the north doorway.

Dr. Chaplin has called my attention to the Church of the Ascension on the Mount of Olives, which, he points out, is also built on exactly the

<sup>1</sup> "*Palestine Pilgrims' Texts.*"

same plan as the Anastasis.<sup>1</sup> It should also be recalled that the Holy Sepulchre has been the model for a large number of churches in all parts of the Christian world, which are round in form, our Temple Church being one of the well-known examples.

WILLIAM SIMPSON.

## THE ALPHABET.

THE derivation of all modern alphabets of Asia and Europe, from the early script of Syria and of Asia Minor, and the derivation of the earliest script from a hieroglyphic system, are facts generally accepted by scholars. That the hieroglyphic system in question was the Egyptian is a very generally received opinion, but objections have been raised to it for several reasons. First, it is urged that the origin of the alphabet should be sought in Asia, where it first appears. Secondly, that the proposed Egyptian equivalents do not resemble the Phœnician or Greek letters, and bear no reference to the names of these letters; and, third, that De Rouge's comparisons are in several cases arbitrary and deficient in principle.

Dr. Isaac Taylor, while developing De Rouge's theory on this subject, has nevertheless stated that a derivation from the so-called Hittite is not perhaps impossible. There is a very strong reason for supposing such a derivation, which briefly is as follows:—The Greek alphabet and the earliest alphabet of Italy contain letters in addition to those of the Phœnician. The Asia Minor alphabets contain even more letters than the Greek. Thus, in Phœnicia, we have only 22 letters, in Greece 27, and among the Carians and Lycians about 30 and 33 letters respectively.

Dr. Sayce has suggested that these additional letters come from the old syllabary, which survived in Cyprus and in Egypt down to the days of Alexander the Great. But, generally speaking, antiquaries do not admit the possibility of a system of writing being made up from different sources. Thus we do not use Hebrew letters interspersed with the Latin, or even running hand with Roman. If then part of the alphabet came from the old syllabary of Asia Minor, it seems most probable that in this syllabary we should seek for the origin of the whole alphabet.

In addition to this consideration there are others which tend to a similar result. The Greeks in the southern islands took, it is true, 20 of the 22 Phœnician letters, and as a rule preserved the Semitic name of the letter and preserved the Semitic order. The Italian tribes, however (Etruscans, Oscans, Umbrians, &c.), did not apparently use these names,

<sup>1</sup> This Church is round, or, to be more exact, it is octagonal, and wants the twelve pillars; but it has a rock, with a footprint on it—said to be that of the Saviour. The Sakhra has also a footprint on it—said to be that of Mohammed's, and made by him when he ascended upwards on his celebrated night journey.



but called the letters *Be, Ce, De, &c.*, and the additional Greek letters in like manner have the names *Chi, Phi, Psi*, names which suggest a derivation from a syllabary, and from those syllables of the syllabary which had a short vowel sound.

Now, in the Cypriote, although the writing is syllabic, we find that the syllables with a short vowel sound are already beginning to be used as consonants. Thus, in the word *Basileus*, the final *S* is represented by *Se*, and in other cases *Ne* stands for *N*, and so on. Here, then, we see a possible means of evolution for an alphabet, and if the Greek and the Phœnician letters are found to be comparable to the syllables with weak vowel sound used in the Asianic syllabary, we have, I think, the most natural origin possible for the alphabet, and may trace it through the syllabary to the original hieroglyphics of Asia Minor. In this case the larger alphabets of Asia Minor, Greece, and pre-Aryan Italy are to be regarded not as the children but as the sisters of the Phœnician, and we see that the Turanians of Asia Minor (Carians, Caunians, Lycians, &c.) did not abandon their original script, as is now supposed, in favour of Greek letters, but always possessed those letters either as letters or in an earlier stage as syllables.<sup>1</sup>














In the Hittite system (so called) there appear to be two classes of signs, just as in Chinese or as in Cuneiform. The one class is the picture or ideogram (the Chinese *Key* or *Radical*), the other class—apparently represented as a rule by smaller emblems—is the weak root or grammatical compliment (the Chinese phonetic), which is used for its *sound* value and not for its picture value. It is, I think, among these phonetics (which are by far the commonest signs on the Hittite texts) that we must search for the original emblems as a rule, while in the syllabary we must confine our comparisons to those syllables which have a short vowel sound, *ă, ě, ě*, and which we find to have been used as letters in the Cypriote.

The attached plate shows the comparison of the Asia Minor, Greek, Italic, and Phœnician letters with the Cypriote syllables of short vowel sound, and in some cases with the original hieroglyphic. It is possible that in some cases the comparison may be improved, but I do not think that the principles here laid down, can be considered unscientific.

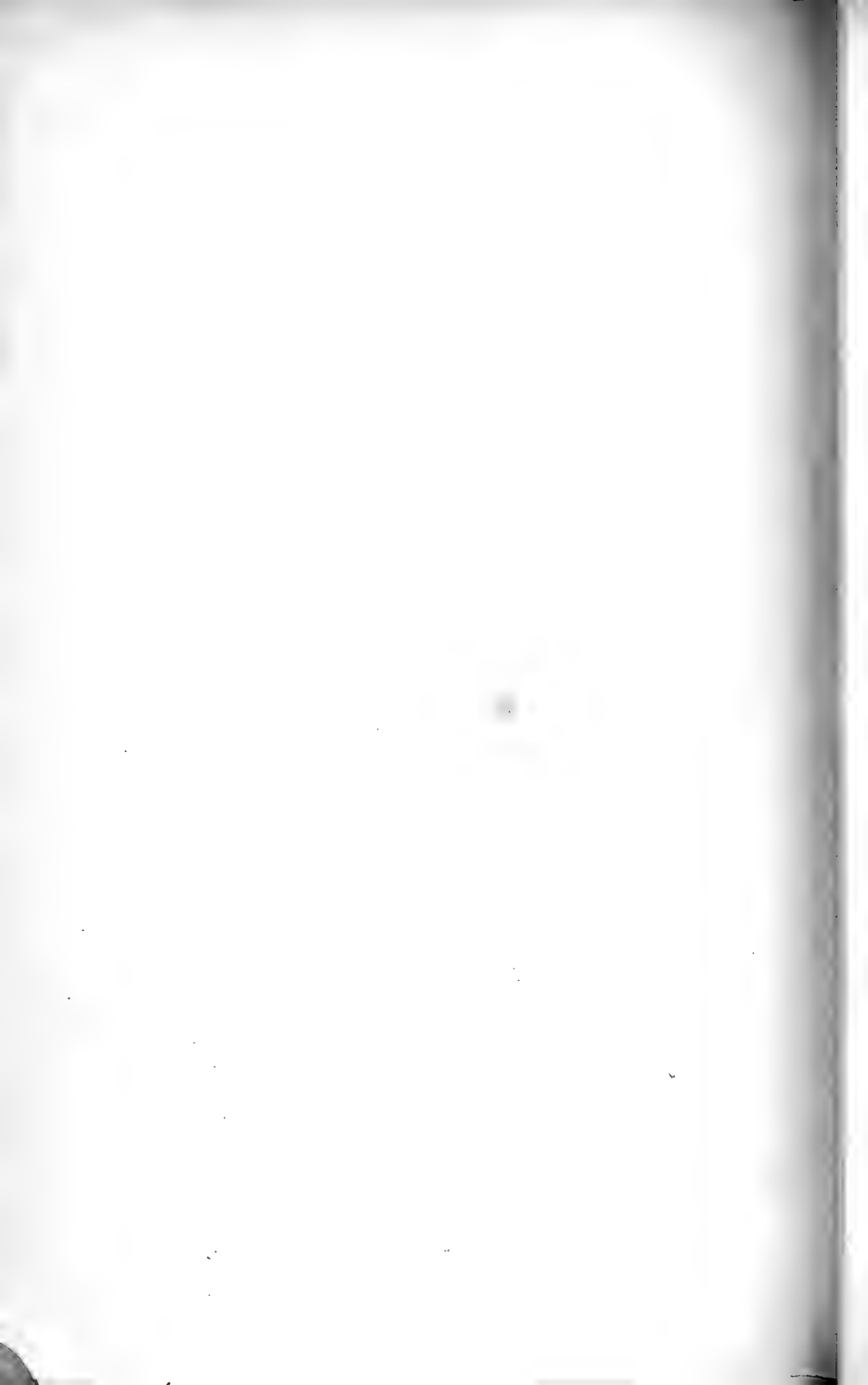
The question of the names of the letters is more difficult. The meaning of the Semitic names is, in many cases uncertain. These names were only used within the sphere of the Phœnician influence, yet in several cases it seems to me that the sound belongs to the original hieroglyphic object, although, with the change from a Turanian to a Semitic language, the name has either been changed or the sound has received a new value, as will appear from a detailed examination.

1. *Aleph*. Possibly an ox head (Accad. *av*, "bull").

<sup>1</sup> The Ionian Alphabet which finally survived in Greece was Asiatic, and perhaps used by the Turanians of Phrygia, Caria, Lydia, and Lycia before the Aryans used it. From Lydia also it would have gone to the Pelasgi and the Etruscans.

|    |   |   |
|----|---|---|
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| 25 |   |   |
| 26 |   |   |
| 27 |   |   |

|    | HITTITE<br>HIEROGLYPH. | CYPRIOTE<br>SYLLABLE. | CARIAN<br>LETTER. | PHOENICIAN<br>LETTER. | GREEK<br>LETTER. | ETRUSCAN<br>LETTER. |
|----|------------------------|-----------------------|-------------------|-----------------------|------------------|---------------------|
| 1  |                        | * * <u>a</u>          | Α                 | Α                     | Α                | Α <u>a</u>          |
| 2  |                        | ʃ S <u>be</u>         | b                 | ʃ                     | ʃ Z B            | 8 ? B ? <u>b</u>    |
| 3  | 𐎗                      | ʃ <u>ga</u>           | )                 | 1                     | ϸ ϸ <            | ) ϸ <u>g c</u>      |
| 4  |                        |                       | Δ                 | Δ                     | Δ                | 9 ? ∇ ? <u>d</u>    |
| 5  |                        | E K <u>e</u>          | E B               | Ξ B                   | Ε Ε              | Ξ <u>e</u>          |
| 6  |                        | ⊥ ⊥ <u>ve</u>         | ⊥ F               | Υ Υ                   | Ϝ                | ⊥ ⊥ <u>f</u>        |
| 7  |                        | ʃ <u>ze?</u>          | ⊥                 | ⊥                     | ⊥ Z              | ⊥ <u>z</u>          |
| 8  |                        | ⊥ H <u>khe</u>        | ⊥                 | ⊥ H                   | ⊥ H              | ⊥ ⊥ <u>h</u>        |
| 9  |                        |                       |                   | ⊕                     | ⊕                | ⊕ ⊕ <u>l</u>        |
| 10 |                        | ʃ <u>ye</u>           | 1                 | ʃ                     | ʃ 1              | 1 <u>i</u>          |
| 11 | 𐎗                      | K <u>ke</u>           | K                 | Υ                     | K                | K <u>k</u>          |
| 12 | 𐎗                      |                       | Λ                 | ϸ                     | Λ √              | √ <u>l</u>          |
| 13 | 𐎗                      | Λ <u>mi</u>           | Λ                 | Υ                     | Μ                | Μ <u>m</u>          |
| 14 | 𐎗                      | ʃ ʃ <u>ne</u>         | Υ                 | Υ                     | N                | Υ √ <u>n</u>        |
| 15 | 𐎗                      | ⊥ ⊥ <u>si</u>         | ⊥                 | ⊥                     | ⊥ ⊥              | <u>s</u>            |
| 16 | 𐎗                      | ∇ <u>ya</u>           | o o               | o                     | o                | o <u>ā</u> <u>o</u> |
| 17 |                        | ʃ <u>pe</u>           | ρ                 | ʃ                     | ρ ϸ              | Λ <u>p</u>          |
| 18 |                        |                       | Μ                 | μ ϸ                   | Μ ϸ              | Μ Μ <u>ls</u>       |
| 19 |                        |                       | ρ                 | φ                     | ρ                | <u>q</u>            |
| 20 | 𐎗                      | ρ ϸ 4 <u>ra</u>       | 4                 | 4                     | ρ ϸ              | 9 Δ <u>r</u>        |
| 21 |                        | Υ √ <u>se</u>         | ʃ                 | W                     | ʃ ʃ              | ʃ <u>s</u>          |
| 22 | 𐎗                      | T ↑ <u>ti</u>         | T                 | + X                   | T T              | X T <u>t</u>        |
| 23 |                        | Μ Υ √ <u>u</u>        | Υ √               |                       | Υ √              | Υ √ <u>u</u>        |
| 24 | ①                      | ⊕ <u>vo</u>           | ⊕ φ               |                       | ⊕ φ              | ⊕ φ <u>ph</u>       |
| 25 |                        |                       | X                 |                       | X                | X ? <u>x</u>        |
| 26 |                        | Υ <u>se</u>           | Υ                 |                       | Υ                | <u>ps</u>           |
| 27 |                        |                       | Ω                 |                       | Ω                | <u>o</u>            |



2. *Beth*. Cypriote *be* is nearest to the early Greek (Melos and Corinth) forms.

3. *Gimel*. Cypriote *ga* ("crook" in Altaic speech).

4. *Daleth*. See what is said below.

5. *Heth*. The closed form is the oldest, perhaps from a hieroglyphic representing a house (*E*).

6. *Vau*. The Greek Digamma. Perhaps the Cypriote *ve*. The Cypriote *u* is, however, nearer to the Phœnician form. (See No. 27.)

7. *Zain*. Perhaps from a Cypriote *Ze*.

8. *Cheth* appears to be the Cypriote *Che*.

9. *Teth* does not appear to be known as yet in Cypriote.

10. *Yod*, "hand," seems to be the Cypriote *ye*, perhaps from an old hieroglyphic hand (*a*, *ya*, &c., in Altaic speech—"the right hand.") The Greek form is a single stroke. In Altaic speech *a*, *ei*, *yat* are words for "number one." The Greek and Phœnician letters may perhaps have different derivations.

11. *Caph* appears to be the Cypriote *ke*. The word is rendered "hollow of the hand."

12. *Lamed*. See what is said below.

13. *Mim*. The Greek and Carian forms suggest a connection with Cypriote *mi* or *me*.

14. *Nun* seems to be a degraded form of the Cypriote *ne*.

15. *Samech*. Apparently the Cypriote *si*, from an emblem for "eye," (*si*, "eye," "see" in Altaic speech). The Pelasgic S would have the same origin.

16. *Ain*. Cypriote *ya*, Carian *a*—a pot in the original hieroglyph (Altaic *a*, *ya*, &c., "water").

17. *Pe*. Perhaps a variation of *Be* (No. 2).

18. *Tsade*. A letter soon lost in the west.

19. *Koph*. See what is said below.

20. *Resh*. The Cypriote *Ra* is tolerably close.

21. *Shin*. Some forms of the Cypriote *se* are similar.

22. *Tau*. In some forms recalls the Cypriote *ti*.

23. *Upsilon* appears to be the Cypriote *u*.

24. *Phi*. Apparently the Cypriote *vo* (or *mo*).

25. *Khi*. See what is said below.

26. *Psi*. Apparently the Cypriote *se*.

27. *Omega*. The Carian *o*.

In this comparison it will be noted that out of 27 letters 20 can be traced in Cypriote syllables having short vowel sounds. The comparison is not quite complete, but our knowledge of the syllabary is perhaps not yet complete either. In 10 cases, the original hieroglyph may be suggested.

The Cypriote signs compared are the commoner or normal forms. As regards the names of the Phœnician letters it is only in 15 cases that any Semitic meaning is known to attach to the names, and in many of these there is much doubt. Aleph "ox," Beth "door," Gimel "camel," Vau

"hook," Cheth "fence," Yod "hand," Caph "hollow of hand," Mim "water," Ain "eye," Pe "mouth," Resh "hook," Shin "teeth," are Semitic words, but it is only in the cases of Aleph, Gimel, Vau, Cheth, Yod, and Ain, that any resemblance is supposed to exist between the name and the form.

It is certain that the Greeks knew and adopted the 22 Phœnician letters found in the early alphabets of Thera and Melos, with the exception of the Phœnician Samech and Tsadi.

On the other hand the early alphabets of Abu Simbil and of Ionia and Corinth already include the letters  $\xi\phi\chi\psi\omega$  about 620 B.C., omitting Samech and Tsadi, and Digamma. A century later the Greek alphabet was complete, having lost Koppa and Digamma. The Italic alphabets retained Digamma as *F*, with Koppa as *Q*, and Samech occurs in Pelasgic. These Italic alphabets never used the Semitic names. The Greek names Alpha, Beta, Delta, &c., seem to be of Aramean, rather than of Phœnician origin.

The Phœnicians wrote only from right to left. In Cypriote, the texts run both from right to left and left to right. The Greeks (and the Pelasgi) wrote Boustrophedon-wise, or in alternate lines, right to left and left to right, just as did the Hittites. Thus the mode of writing as well as the characters connect Greek epigraphy with Hittite hieroglyphics.

It is to be noted that in the cases of *Teth*, *Tsadi*, and *Koph*, there is a good reason for not finding them in Cypriote. They are Semitic letters, which naturally do not represent sounds of the Greek dialect of Cyprus. *Chi* and *Omega* are late additions to the Greek alphabet, and these not unnaturally do not appear in Cypriote. The only two others not accounted for are *Delta*, the  $\delta$  and  $\tau$  not being distinguished in Cypriote, and *Lambda*, which may be the Cypriote *le* or *re*.

The present opinion of some antiquaries that the Greek alphabet has a ~~Hebrew~~ origin, appears highly unsatisfactory in view of the manner in which the letters may, in so many other cases, be traced in Cypriote, and nothing could be more natural than a Cypriote derivation for Greek letters, since we know that the Greeks used this character about 400 B.C. The fact that Etruscans, Pelasgi, and the Lycians,<sup>1</sup> Carians, and Phrygians, used the same characters with the Greeks is also easily explained by the Turanian and Asiatic origin of the letters.

C. R. CONDER.

<sup>1</sup> The Lycian included five other vowels of doubtful sound not here shown, four of which compare with Cypriote; two of them occur in Carian and one in Phrygian; another vowel, common to Phrygian and Lycian, is to be added, making 33 letters in all. In other respects Lycian is like Carian, though not known to have possessed letters 8, 15, 18, 19, 24, of the table.

## THE HEBREW MONTHS.

THE calendar used by the Jews after captivity was that of the land of their captivity, but the month names belonging to this calendar are only mentioned in the later books : Ezra i, 7, viii, 19 ; Neh. i, 1, vi, 15 ; Esther ii, 16, iii, 7, viii, 9, ix, 26 ; Zechariah i, 7, viii, 19. Here we find the months—

|                |      |                                  |
|----------------|------|----------------------------------|
| 10. Tebeth.... | .... | December January.                |
| 11. Sebat .... | .... | January February.                |
| 12. Adar ....  | .... | February March.                  |
| 1. Nisan ....  | .... | March April.                     |
| 2. — ....      | .... | April May (Ijar ?).              |
| 3. Sivan ....  | .... | May June.                        |
| 4. — ....      | .... | June July (Tammuz ?).            |
| 5. — ...       | .... | July August (Ab ?).              |
| 6. Elul ....   | .... | August September.                |
| 7. — ....      | .... | September October (Tisri ?).     |
| 8. — ....      | .... | October November (Marchesvan ?). |
| 9. Chisleu     | .... | November December.               |

In the cases marked in brackets the month is only mentioned in these books by its number.

In the book of Kings, however, we find the names of three months (1 Kings vi, 1, 38, viii, 2)—

“ in the month Zif, which is the second month.”

“ in the month Bul, which is the eighth month.”

“ in the month Ethanim, which is the seventh month.”

These are the old Hebrew month names which do not occur in the Aramaic calendar, and which already, when the Book of Kings was penned, seem to have required a note to explain when they occurred in the year.

When we turn back to the Pentateuch we find notices of the first month (Exodus xii, 2, xiii, 4, xxiii, 15, xxxiv, 18 ; Deut. xvi, 1). Hence we learn that up to the time of the Captivity—

|         |   |            |                  |
|---------|---|------------|------------------|
| Abib    | = | Nisan      | the first month. |
| Zif     | = | Sebat      | „ second „       |
| Ethanim | = | Tisri      | „ seventh „      |
| Bul     | = | Marchesvan | „ eighth „       |

But we have no other means of knowing what were the names of the other eight Hebrew months before the Aramaic calendar came into use.

It is usual to suppose that the Aramaic names of the other months

were used by the early Hebrews. This idea arose at a time when the month names had not been recovered in cuneiform records, but were only known from the Bible, and from later Jewish literature. There is not, as far as I can find, a shadow of foundation for this view.

The Assyrian calendar compares with that used after the Captivity, as follows :—

| Jewish.     | Assyrian.                 |
|-------------|---------------------------|
| Nisan.      | Nisannu ("beginning").    |
| Ijar.       | Airu ("light").           |
| Sivan.      | Sivanu ("bricks").        |
| Tammuz.     | Dumzu ("sun").            |
| Ab.         | Abu.                      |
| Elul.       | Ululu.                    |
| Tisri.      | Tasritu ("beginning").    |
| Marchesvan. | Arah Samna ("8th month"). |
| Chisleu.    | Kisilivu ("giant").       |
| Tebeth.     | Tebituv ("rain").         |
| Sebat.      | Sabatu ("storm").         |
| Adar.       | Addaru ("dark").          |

These names occur also in the calendars of Palmyra, of Heliopolis, and of the old Sabæans in South Arabia (with certain exceptions), and are said to have been Babylonian in origin; but none of these calendars include the names Abib, Zif, Ethanim, Bul.

When, however, we turn to the Phœnician monuments we find the following notices of months.

On the coffin of Eshmunazar we read: "In the month Bul, in the fourteenth year . . ."

On a Phœnician text from Larnaca: "In the new moon of Ethanim."

It is clear from these cases that in all probability the Phœnicians and the Hebrews, before the Captivity, used the same calendar, and that this calendar differed from that of the Babylonians. The Phœnicians continued to use this calendar in Persian times, and apparently after the Jews adopted the Assyrian calendar.

As regards the meanings of the names, we are informed by Gesenius that Abib means "green ear of corn," being the month of corn ripening, but the meaning of Zif seems doubtful, as also Ethanim. Bul he renders "showers," which is equivalent to the Aramaic Tebeth, "rain," the later name of the tenth month. October November is the month of "showers" still in Palestine, and November December of "rain."

The reason why special importance attaches to these month names is that they serve to show, to a certain extent, the age of the books in which they occur. Ezra, Nehemiah, Esther, and Zechariah are late books belonging to the period of Persian rule. Here it is natural to find the Aramaic calendar, but if we found this calendar used in the Pentateuch it would be a critical argument in favour of late date. On the contrary,



we find in both Exodus and Deuteronomy not only the old name Abib, but in Kings the old names used with an explanation, as if already archaic terms requiring some explanation—the Book of Kings being later than the Pentateuch.

Whether the Phœnician calendar was throughout the same as the old Hebrew, whether any names of months were common to the Babylonian and Phœnician systems, and whether every month had a name in the earlier calendar, are questions which, as far as my information goes, remain still unanswered. The “third month” is mentioned in Exodus only by its number (xix, 1); Ezekiel (i, 1) speaks only of the “fourth month” (*cf.* 2 Kings xxv, 3); the “fifth month” (2 Kings xxv, 8; Ezek. xx, 1), the “sixth month” (Ezek. viii, 1), the “twelfth month” (2 Kings xxv, 27), are only mentioned by their numbers before the Captivity.

We possess the names of four other Phœnician months on inscriptions as follows.<sup>1</sup> On a text from Larnaca, in Cyprus, we read **זבאשמש** **ירח**, “the month of sacrifices of the sun.” On another Larnaca text we find **ירח כרפא**, which was known at Carthage as **כרפאם**, showing that the Carthaginian calendar was probably the same as that of Cyprus. This word means “healing,” “refreshing,” “tranquil.” There was a Phœnician God called Baal Merafe. On one of the Dali inscriptions we find **ירח כרר** [י], the month of “going in a circle,” or “dancing.”

We have, therefore, apparently names for eight out of the twelve Phœnician months, though in three cases we do not know which month of the year is intended. The eighth is Faaloth, mentioned on the text from Larnaca, which notices Ethanin, and supposed by Renan to be the sixth month. **פעלת** means “work,” “preparation,” and if the sixth month be really intended, the reference would no doubt be to the ploughing, which began in September. The sacrifices of the sun may be supposed to have occurred at the time of the summer solstice, and the dances of the ancients frequently took place at the autumnal equinox, or at the winter solstice. The month of “refreshing” or “healing” may have been a cool month, perhaps February March, which would well bear such a designation in Palestine.

Distinguishing these three months by a query, we obtain the following calendar for Phœnicia from the monuments. It is to be observed that these months are lunar. The word for month is **ירח**, “moon,” and so also at Sidon, on the mutilated inscription of Bodashtoreth, the same word occurs.

#### PHœNICIAN CALENDAR.

1. (Abib ?), “green ears.” Vernal equinox.
2. (Zif ?).
- 3.
4. (?) Zebakh Shamash, “sun sacrifice.” Solstice.

<sup>1</sup> See Renan, “Corpus of Semitic Inscriptions,” I.

- 5.
6. Faalot, "work."
7. Ethanim. Autumnal equinox.
8. Bul, "showers."
- 9.
10. (?) Carar, "dance." Solstice.
- 11.
12. (?) Merpa, "refreshment."

It seems more than probable that this Phœnician calendar may have been that of the Hebrews in the days of Solomon.

In the remarks made by critics like Wellhausen on the calendar, I find no reference to this monumental evidence. He regards the fixation of feasts by phases of the moon as a later alteration. But the Hebrews and the Phœnicians had no word for month save "moon," and only saved their calendar from becoming vague, like that of the Moslems, by the interpolation of an additional month. There is no evidence at all that they ever used a true solar year such as the Egyptians possessed. The latter had 12 months of 30 days, and five epagomenæ, or odd days. Even in the days of Ptolemy Euergetes (Decree of Canopus), no allowance is made for the difference of the solar and sidereal year since the rising of Sirius is said to advance one day in four years, although Dr. Birch believed the fixed year to be as old as the days of Rameses II. There is, however, I believe, no known evidence of the use of a true solar, or of a sidereal year, by Semitic people.

C. R. CONDER.

## NOTES BY MAJOR CONDER.

### I.

#### MEJARKON.

"THE yellow water," Josh. xix, 46, in the territory of Dan, near Rakkon (Tell-er-Rakkeit), I have proposed to identify with the 'Aujeh river, on account of its turbid waters which wash down sand. I find the following note in Pausanias iv, xxxv.


"The country of the Hebrews, too, not far from the city Ioppa, affords a yellow water which is perfectly similar to the colour of blood. This water is near the sea; and they report that Perseus, when he slew the whale to which the daughter of Cepheus was exposed, washed himself from the blood in this fountain."



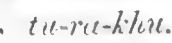
This applies clearly to the 'Aujeh river, near Jaffa, where the story of Perseus was localised.

C. R. C.

## II.

## TARKU.

ON the Hittite bilingual the first word is Tarku , according to Mr. Pinches' decipherment.<sup>1</sup> This I have already compared with the Turkic *tarkhan* (Uigur), *targan* (Tchuwash), to which I may now add the Mongolian *darga* or *dargo*, "chief," and the Cossack *turughna* having the same meaning.

The corresponding Hittite sign is the head of a goat or deer, or similar horned animal, which, it is agreed, should have the same sound. In cuneiform we find the ideogram for deer to be , originally perhaps a deer's head, which is syllabically represented by , *da-ra* in Akkadian, and in Assyrian by , *tu-ra-khu*. Probably this word still survives in the Hungarian *zerge*, "antelope," and perhaps it may be connected with the Mongolian *turguñ*, meaning "swift."

I find, however, that Dr. Hommel ("Zeitschrift für Keilschriftforschung," 1, 2), gives the sound *daragh*, as well as *dara*, for the Akkadian of the ideogram, and regards the Assyrian *turakhu* as a loan word of Akkadian origin.<sup>2</sup> I find, moreover (1, 4), that he has already, in 1884, compared the Hittite Tarku with the Cossack *turughna*, though he does not mention the Turkic and Mongol words.

I have already mentioned that the same word occurs in the Etruscan Tarquin, known in inscriptions as *Tarchi*, *Tarchu*, *Tarchnas*, *Tarenal*, in proper names (Dennis, "Etruria," 1st edition, vol. ii, p. 41).

It will surely be allowed that the Akkadian word for deer, *darag*, gives a close approximation to the word for "chief" used in so many Altaic languages, so that the deer's head in Akkadian may stand for "chief."

C. R. C.

<sup>1</sup> Preceded by , showing it to be a man's name.

<sup>2</sup> The head on the Hittite bilingual is usually taken for a goat. In Greek we have *τράγος* for "goat," perhaps not an Aryan word, the common Aryan word being represented by the Sanskrit *agá*. It is also worth notice that in Hungarian *Türkölni* and *Türközni* mean "to butt" like a goat (Bizonfy's "Dictionary"). It occurs also in Esthonian *torkan*, "to thrust," *torgin*, "to pierce," Finnic *turkin*, *turkkän*. It seems, therefore, not improbable that the radical meaning of these words is "that which pierces with its horns," hence stag, goat, &c. Mr. Ball has proposed to compare the Greek *ῥορκας*, a gazelle.

## III.

## ASIA MINOR WORDS.

To the words mentioned in the *Quarterly Statement*, July, 1888, a few may be added from the same lists.

*Μόσσυν* is said to have been a Moschian word for a "wooden house," and *Μυσός* a Lydian word for the "beech." Compare the old Turkic *Mas*, "tree," "wood" (in Yakut), and Manchu *muk*, "tree." In this case the first word will be *Mos-un*, "tree house," *un* being Turkic for a dwelling (Akkadian *unu*).

*Τεγοῦν*, Lydian for a "robber," might be compared with the Yakut *Tiökün*, "a cheater;" and the Lydian | β υ, "much," might compare with Turkish *çok*, "much." The Lydian *Κοαλαδεῖν*, "king," may compare with the Yakut *Kolobo*, Russian *Koloba*, "chief." *Παλμυς*, Lydian for "king," may be connected with the Akkadian *Pal*, "chief;" Hungarian *felem*, "to elevate;" Turkish *بالا*, *Bala*, "high." In Chagatai, a very ancient Turkic language, we have the verb *Bailamak*, "to govern."

C. R. C.

## IV.

## KING ORRY'S STONE.

ANY correction, even of a passing allusion, should be welcome to an author, and I therefore wish to note one which has been pointed out by three Manx gentlemen for "Heth and Moab."

On page 199 I have written—

"In the Isle of Man the laws are read annually by the stone of King Orry, to whom grass is offered."

This is given as one instance of the well-known fact that corn, fruits, and other objects were offered, to a very late period, at holy stones. Cesnola speaks of the practice in Cyprus, and I have gathered other instances. But some inaccuracy seems to have crept into my allusion.

The laws are not, I find, read at King Orry's stone, for the Tynwald mound, near the church of St. John, is on the other side of the island. The stone is shown near Laxey, but the name of King Orry seems much mixed up with controversies, as was evident at the British Association, 1888, when his name, attached to his supposed grave, was stated to represent a quite modern antiquarian joke.

The more correct form of the statement concerning grass appears to be that a mythical earliest King of Man exacted a bundle of meadow grass as tribute on Midsummer Eve, for all the lands of the island. This is stated in a Manx ballad of the 16th century, and is regarded by my correspondents as simply a manorial custom.

In Brown's "Guide to the Isle of Man," p. 200, I find mentioned "the monolith known as King Orry's stone." It is shown on the Ordnance Survey as a "standing stone," near what seems to be popularly known as "King Orry's grave," some 2 miles from Laxey. On p. 315 of the same guide I find mention of Mannanan "as a Paynim and a necromancer, the first who held the enchanted island. . . . The same ballad informs us that the rent paid to this wizard king was a bundle of coarse meadow grass from each landholder yearly at midsummer, brought by some to the top of the mountain of Barrule, and by others deposited with Mannanan himself at Keamool"—Barrule being on the north-east. The same guide book attributes the Tynwald Mount to King Orry, and regards the rushes there strewn at the annual midsummer ceremony of reading the laws, as "in lieu of a rent charge from the small estate of Cronk." My present correspondents regard it as simply the old custom of carpeting the ground with rushes.

This instance shows in an interesting manner that the Palestine Exploration publications are widely known at home, and any correction, even of a sentence which is not directly connected with Palestine matters, is welcome.

C. R. C.

## V.

### ESSEBU.

THIS word appears to connect the Akkadian, in which it is usually rendered "prince," with the Hittite, in the names of the Hittite kings—

Tartisebu,  
Akatisebu,

and perhaps occurs in the name of Ispuinis, King of Van. It is interesting in this connection to note that in the language of the Ostiaks of the Narûn, *Essep* still occurs with the meaning "father;" other words in Akkadian and in Turkic speech (such as *Ai*, *Aga*, *Ata*) mean both "father" and "chief." In the dialect of the Ostiaks of Wasynga, we get *Essem* for *Essep* (Klaproth, "Asia Polyglotta"). In the Egyptian the word is spelt  $\aleph \aleph \aleph \textcircled{c}$ . It may be the near relation of the common Mongolian *Esega*, "father." The Mongolian *eke*, "mother," occurs in Akkadian, as well as the Turkic *Ama* or *Ana*.

C. R. C.

## VI.

## JERASH TEXTS.

HAVING had occasion to refer again to the longest of the texts in hexameter at Jerash (P. E. F. *Quarterly Statement*, 1870, September), it appears to me that the writer refers not to a slaughter house, but to the Pagan temple, beside which the church rose.

As churches were not built before the reign of Constantine (at least not such buildings as that at Jerash), the text is probably not older than the 4th century. I did not see this longer text, but copied the shorter one, also in hexameter, concerning a wrestler named Theodorus, whose body is in earth, and his soul in the wide heaven. The forms of the letters on this latter agree with the Greek cross in giving a date not earlier than 330 A.D. I attach a hexameter translation of the longer text in support of my view as to its meaning.

Wonder and awe together the passer by have encountered  
Clouds of error are gone and now in place of the darkness  
Which was aforetime here the Grace of God is around me.  
And when the sound of the groans of the four-footed victims is  
silenced

Formerly falling here—and dire was the stench that arose :  
So that the way faring man must stop his nostrils in passing  
Yea and strive to escape the evil smell on the breezes.  
Now on the sweet-smelling plain the wandering travellers journey  
Lifting up as they go the palm of the right to their faces  
Making the honoured sign of the cross as a deed that is holy.

And if you further would ask this also that you may know it  
Æneas<sup>1</sup> to me has given this excellent glory  
Æneas the all-wise priest well instructed in worship.

C. R. C.

## VII.

## THE TELL AMARNA TABLETS.

THE recent find of Babylonian Cuneiform tablets between Memphis and Thebes, in Egypt, appears likely to be important in reference to Palestine. The date is believed to be about 1430 B.C., which, according to Usher's "Chronology," would represent the time of Joshua, but perhaps more probably preceded the Hebrew conquest of Palestine. It is not our oldest monumental information, since we have much information about Palestine in the days of Thothmes III, a century and a half earlier, but it is a century

<sup>1</sup> Æneas is a name which occurs in Palestine in the time of Herod as that of a Nabathean ruler in Petra.

before Rameses II. From these tablets it appears that the kings of Mesopotamia were allied to those of Egypt; that trading and political relations existed; that royal intermarriages occurred; that the art work of the East was prized in Egypt; and probably that the Semitic race had occupied Northern Syria, mingling with the Hittite population. We have a notice of Tyre nearly a century earlier than those previously obtained from Egyptian documents; and Cuneiform tablets were sent, we see, to Egypt, though it does not seem certain that the script was there readable, since ambassadors accompanied the letters, who may alone have been able to read them, just as British official letters are not always in the language or character of the recipients, or understood by them.

The city Tunep (*Tennib*) is mentioned in connection with the Hittites, and Tunep appears as a Hittite city in later Egyptian records. Towns called *Gimti* (? Gimzo), near Ashdod, *Kilti*, and *Rabbah*, are mentioned; and *Zumurimma* (cf. Zemarites זמרית Gen. x, 18, the Simyra of Strabo, xvi, and Zemaraim, Josh. xviii, 22), and *Sardit* (perhaps Sardis): the *Serru*, "at the entrance of the land of Egypt," recall the Shasu tribe called *Saaru*, whose name has been connected with Mount Seir. The city *Abez* recalls

*Abez* (Josh. xix, 20, אבז now probably البيضاء *el Beida*, on the north edge of the Plain of Esdraelon); *Asi* (or Cyprus?) is also mentioned, and *Tsumura* (Simyra); also the land *Akharra*, "the west" (or Phœnicia).

One of these letters appears to have been sealed in Egypt on arrival with a royal seal. The city *Tsurri* (perhaps Tyre) occurs with *Ziduna*, or Sidon. The land of the *Khatti* or Hittites is also noticed. One letter comes from the king of part of Mesopotamia, east of the Hittite country. This king, who says that his father was at peace with Egypt, asks for an Egyptian princess for his nephew, and sends presents of gold jars, gold plates, and precious stones. In this letter an early notice of the Assyrians as allies is found.

The king of another country, not yet well fixed, but clearly with Semitic rulers, and probably Mesopotamian, sends his ambassador with a letter and with five bronze vessels. These seem not to have been at that time manufactured in Egypt. The *Kharu*, more than a century before brought such vessels as tribute to Egypt. Trees are also sent; and Thothmes III took trees from Syria as part of his spoils. This monarch also asks the King of Egypt not to make any treaty with the King of the Hittites, or with the King of Shinar. This is an interesting political note, in presence of the fact that Rameses II and his predecessor, as we know from Egyptian records, actually allied themselves with the Hittite Princes.

When we remember how the merchants from Midian took Joseph to Egypt in one of their ordinary trading journeys, these further revelations of the early civilisation of Palestine become highly interesting; and the period appears to be intermediate between the two dates (1600 B.C. and 1340 B.C.) to which our information was formerly confined, when only Egyptian records were known. The existence of a Semitic race in

Phœnicia itself, with rulers from the East, seems to be indicated; thus confirming the traditional view as to the derivation of the Semitic Phœnicians from Chaldea. We hear nothing of the Hebrews, for they were as yet not a power in Palestine, but we hear perhaps of the "Sons of Seir," who were organised under a king when Israel came from Egypt to Edom.

There are other tablets of this series still to be read, which may give us other interesting notes as to Palestine. The find is one of the most important yet made in connection with the monumental history of Syria.

C. R. C.

### VIII.

#### RECENT NOTES ON THE HITTITES.

THE recently-published Proceedings, Biblical Archaeological Society, contain papers in which some useful notes on the Hittites appear. We should not reproach the author (Rev. C. J. Ball) for his conversion from the belief that the Hittites were Semitic, and in many respects he appears to have profited by recent publications. Armenian, on which he in great measure relies, is not a safe guide, since it is known to be a very mixed language, with a large Turanian vocabulary. Questions of etymology are generally very vexed, but while regarding the Hittites and other tribes as Aryan, he has come to see that some of their names are comparable with Etruscan and other Turanian words. That he does not acknowledge the prior publication of these facts by the Palestine Exploration Fund is of little importance, in view of the furtherance of truth by the acceptance of their work. That he is right in regarding some of the tribes encountered at a late period by the Assyrians as Aryan will probably prove to be the case. This does not touch the question of the Hittite nationality a thousand years earlier. It is to be regretted, however, that he has not treated of words of *known* meaning, such as have been enumerated in the last number of the *P. E. F. Quarterly Statement*.

At the British Association at Bath Prof. Sayce allowed that it was now the general opinion that the Hittites were Mongolic. Dr. Isaac Taylor has published his belief in this view, and I believe I might mention two other authorities who consent. Mr. Ball, however, has not called attention to the existence of some of the words he notices (such as Tarku and Sar) in Turkic and Mongolic dialects. He compares *Tutamu* with Homer's Pelasgian Teutamus ("Iliad," ii, 843), but assumes the Pelasgi to have been Aryans. He discovers the survival of the Hittite name Saplel in a Syriac account of an Armenian King Saplul (as Halevy has previously noted), which is very interesting, but not a safe indication of Aryan origin for the name. He compares Tarku with the Etruscan name Tarcho ("Æn." viii, 506, 603), and Lara with the Etruscan Lar, in both of which remarks he is preceded by my papers in the *Quarterly*



*Statement.* Etruscan comparisons show, however, a Turanian and not an Aryan affinity. The comparison with the Scythian Targitaus also probably tends in the direction of Turanian origin. The Parthian *torkis*, "king," which he also compares, is, according to Spiegel, not an Iranian (*i.e.*, Aryan) word. *Kamru*, a word he takes to mean house, does not occur in Hittite records.

As regards the inscriptions, he follows "Altaic Hieroglyphs" in comparing the deer's head with *Tar*, *Dard*, and *Darag* (or *Tark*) in Akkadian, but Akkadian is not an Aryan language. He also compares the *Dim* of the bilingual with the Cuneiform *Dim*, as I have previously done in "Altaic Hieroglyphs." He adds an interesting note that the amulet (Hittite, *Ra*) which, as I have noted, was used in Phœnicia and at Carthage, also occurs on Sassanian coins as the emblem of the Fravashi or guardian spirit. He accepts the first emblem of the Hamath stones as meaning "speech," comparing it with the Egyptian determinative, as I have already done in 1883; and he accepts my value *Ne* for the Hittite pronoun emblem. The following principles, which he lays down, are all strictly adhered to in my decipherment, but were, in cases 2 and 3, disregarded by Mr. Ball, when he attempted to read the Hamath stones as Hebrew in 1887.<sup>1</sup>

(1.) The inscriptions are to be read *towards* the faces (meaning from the end, towards which the faces look).

(2.) Symbols placed one above the other are to be read vertically downwards from top to bottom, and this order is invariable. This is true, and is the case in the Akkadian texts of Tel-lo. Mr. Ball formerly read without regard to this law.

(3.) Like the Egyptian the character is partly ideographic, partly phonetic. This has been pointed out clearly in my previous papers, but I think Mr. Ball hardly gives enough attention to the ideographic value.

(4.) The text J. 1 reads A. B. C. D. This is clear when the original is inspected. Prof. Sayce, reading from a photograph, has unfortunately been misled into reading A. C. B. D.

<sup>1</sup> As showing the vague results of etymology from single unknown sounds we may instance Antar. Mr. Ball renders "forest" from Armenian. In Etruscan, antar means "eagle." *Thamima*, "sea," he compares with *Támara*. Surely it is as near *Tiamat*, the Akkadian "ocean." If the Aryan *çara* means "head," "leader," so does the Turanian *Tsar*. If *Bag* is to be compared with the Aryan *Bágha*, it equally compares with the Turanian *Bak*. These facts are in some cases explained by the Aryan and Turanian roots being the same, but if exception be taken to comparing Hittite with the earliest languages of Western Asia, which are not Semitic, that objection is tenfold stronger when modern languages of mixed character, like Armenian or Georgian are used. The same applies to comparing Cypriote direct with Cuneiform. Mr. Ball gives twenty-six cases, of which I believe *three* are correct. As to his proposals for translating a few groups on the monuments, the arguments do not appear to be very strong, and further study of the symbols may lead him to see that the proposed values are untenable.

The objections in principle which, it seems to me, will be raised to Mr. Ball's system are, 1st, that he has paid no attention to words of *known* meaning, but relies on etymologies of names which he compares without distinction with Aryan and Turanian languages, and with mixed languages like Armenian. 2nd, that in comparing Cypriote and Cuneiform he compares *late* forms, which are always misleading, and does not adhere to one epoch (which should be the *oldest* known), and places his Cuneiform emblems erect or prostrate, as suits the comparison, instead of adhering to the oldest erect forms. 3rd, that when emblems which differ occur in groups with emblems the same in the groups compared, the different emblems are regarded as equivalent. Prof. Sayce has done the same, but there is no safe ground for such a supposition any more than if we were to find C. A. B. on one text and C. O. B. on another, and should argue that therefore A. is the same as O. There are only about 130 known Hittite emblems, of which about 50 (probably phonetics) are very common. The presumption, therefore, is that these (as in Medic and other syllabaries) had each a distinct sound, and not that two or more had the same sound, and were used as equivalents. 4th, that he has made no exhaustive study of any single emblem as regards its position in the texts; and 5th, which is also a matter of principle, that he reproduces in many cases the work of others without any acknowledgment.

C. R. C.

## NOTE ON MR. I. C. RUSSELL'S PAPER ON THE JORDAN ARABAH AND THE DEAD SEA.

By Professor EDWARD HULL, LL.D., F.R.S.

[Extracted from the *Geol. Mag.* Dec. III. Vol. V. No. 11, 1888.]

I HAVE been very much interested in reading Mr. Russell's two communications published in the "Geological Magazine" for August and September last.<sup>1</sup> The analogy which he draws between the history of the Dead Sea valley and that of some of the lake valleys in the western part of North America is instructive as showing how similar physical features can be accounted for on similar principles of interpretation over all parts of the world. Mr. Russell very properly draws attention to the paper by his colleague Mr. G. K. Gilbert on "The Topographical Features of Lake Shores," in which principles of interpretation of physical phenomena are laid down applicable to lakes both of America and the Jordan-Arabah valley.<sup>2</sup> With some of Mr. Russell's inferences regarding special epochs in the history of this valley I am very much disposed to agree; more particularly in reference to the mode of formation of the Salt Mountain,

<sup>1</sup> "The Jordan-Arabah Depression and the Dead Sea," "Geol. Mag." Aug. and Sept. 1888. pp. 337-344 and 387-395.

<sup>2</sup> Gilbert, Fifth Annual Report U.S. Geological Survey (1883-84).

Jebel Usdum ; or rather, of the salt-rock which forms the lower part of its mass. If this interpretation be correct, it removes the difficulty of understanding why the rock-salt is confined to one small corner of the lake, which, at the time the salt was in course of formation, was vastly more extensive than at present.

The case of the arm of the Caspian known as Kara Bughaz, which Mr. Russell cites, seems remarkably apposite to that of the Southern bay of the Dead Sea ; and I feel obliged to the author for his suggestion. In reference to Mr. Russell's statement that "we ought to look for an unconformity between the upper and lower lake beds due to the erosion of the lower member," I wish to take this opportunity of referring again to the peculiar structure in the rock-salt near the northern end of Jebel Usdum, where the white laminated marls, forming the upper part of this plateau, are seen resting horizontally on a mass of rock-salt, having an oblique structure ; that is, traversed by planes sloping southwards at an angle of about  $20^{\circ}$   $25^{\circ}$ . I made a sketch of this part of the cliff in my note-book, but from inability, through lack of time, to examine into the phenomena with more care than can be done from horseback, I thought it prudent not to refer to the matter in the "Geological Memoir,"<sup>1</sup> further than to notice it.

My special purpose in this communication is to offer some additional information to that already given on the question whether or not the Jordan-Arabah valley originally communicated with the ocean through the Gulf of Akabah. Mr. Russell is not satisfied with the information already before him regarding the nature of the watershed of the Arabah. I have, therefore, referred back to my notes, which are rather full on this very subject, though I did not consider it necessary to give them *in extenso* in the "Geological Memoir," or in "Mount Seir." On referring to the large Map of the Arabah Valley in the "Memoir" (facing p. 137), it will be seen that the watershed (Lat.  $30^{\circ} 10'$  N.) is formed partly of a limestone ridge called Er Rishy, and partly of "gravel of the Arabah." This gravel extends for several miles down both slopes of the watershed, and is sometimes overspread by blown sand, or else by alluvium. On the west side it is bounded by the steep, often precipitous, cliff of the rocks forming the eastern border of the Desert of the Tih (Badiet et Tih), and on the east by those of the Edomite hills and escarpments ; and at its lowest part rises about 700 feet above the level of the Mediterranean and Red Seas,<sup>2</sup> and therefore nearly 2,000 feet above the present surface of the Dead Sea. On approaching the watershed, or saddle, from the south, it appears as a level line stretching from the northern end of Er Rishy to the foot of the rugged hills of Edom, and about half a mile in length. It is formed of

<sup>1</sup> "Memoir on the Physical Geology of Arabia-Petrea and Palestine," p. 84 (1886).

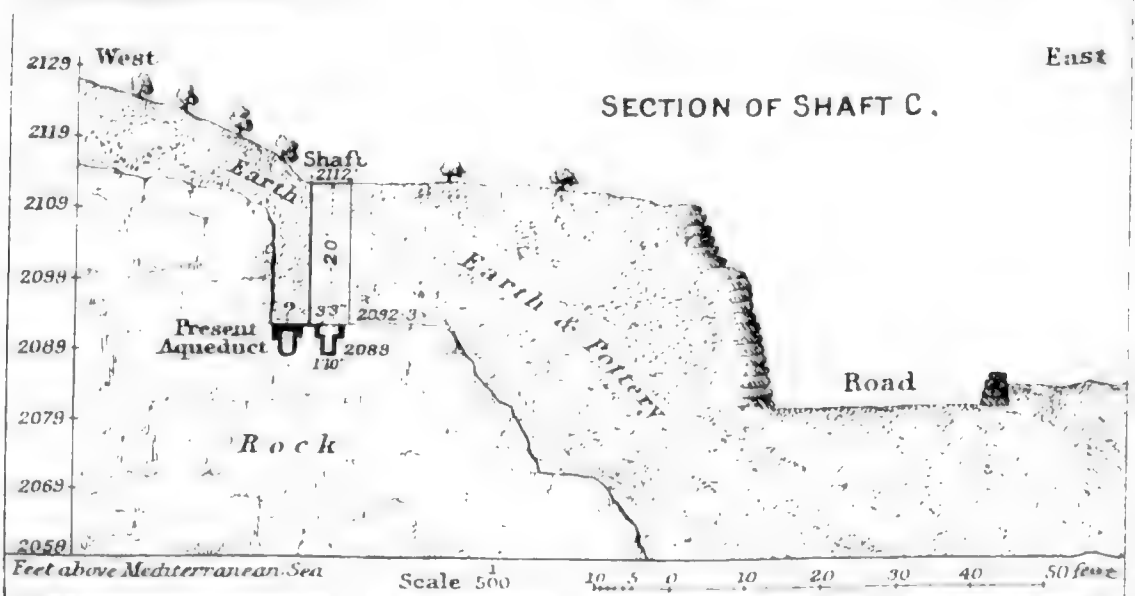
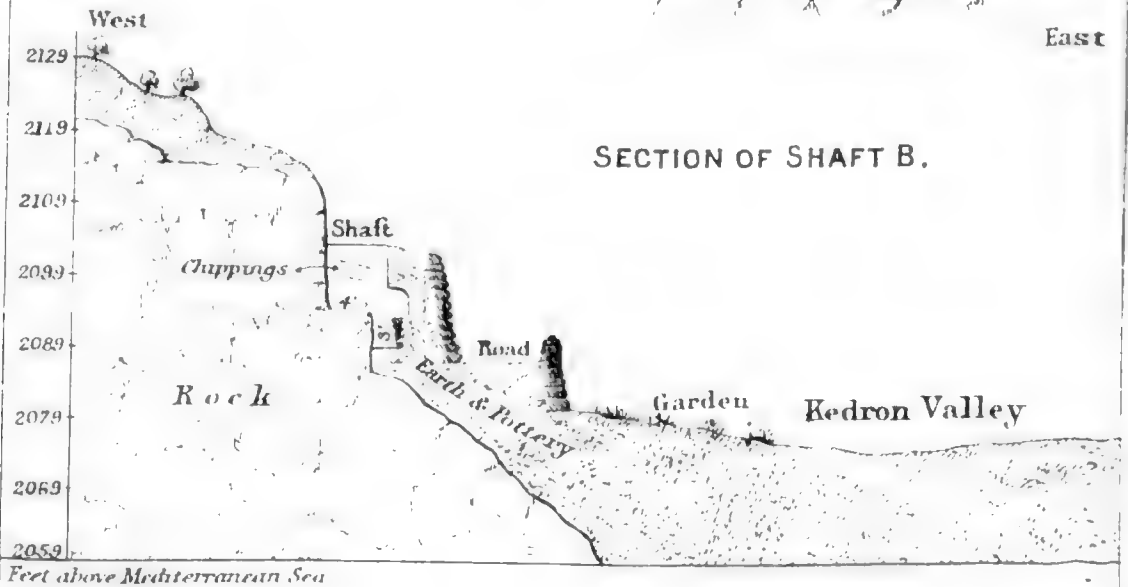
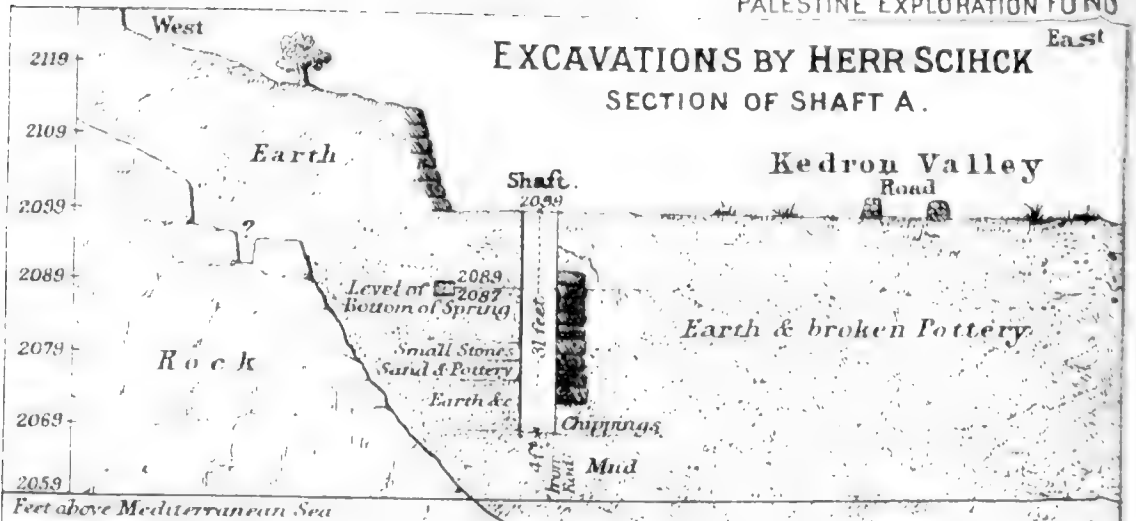
<sup>2</sup> M. Vignes' determination is 787 feet (240 mètres) ; that of Major, now Colonel Kitchener, is 660 feet ; and that of Mr. Reginald Laurence by aneroid 650 feet.

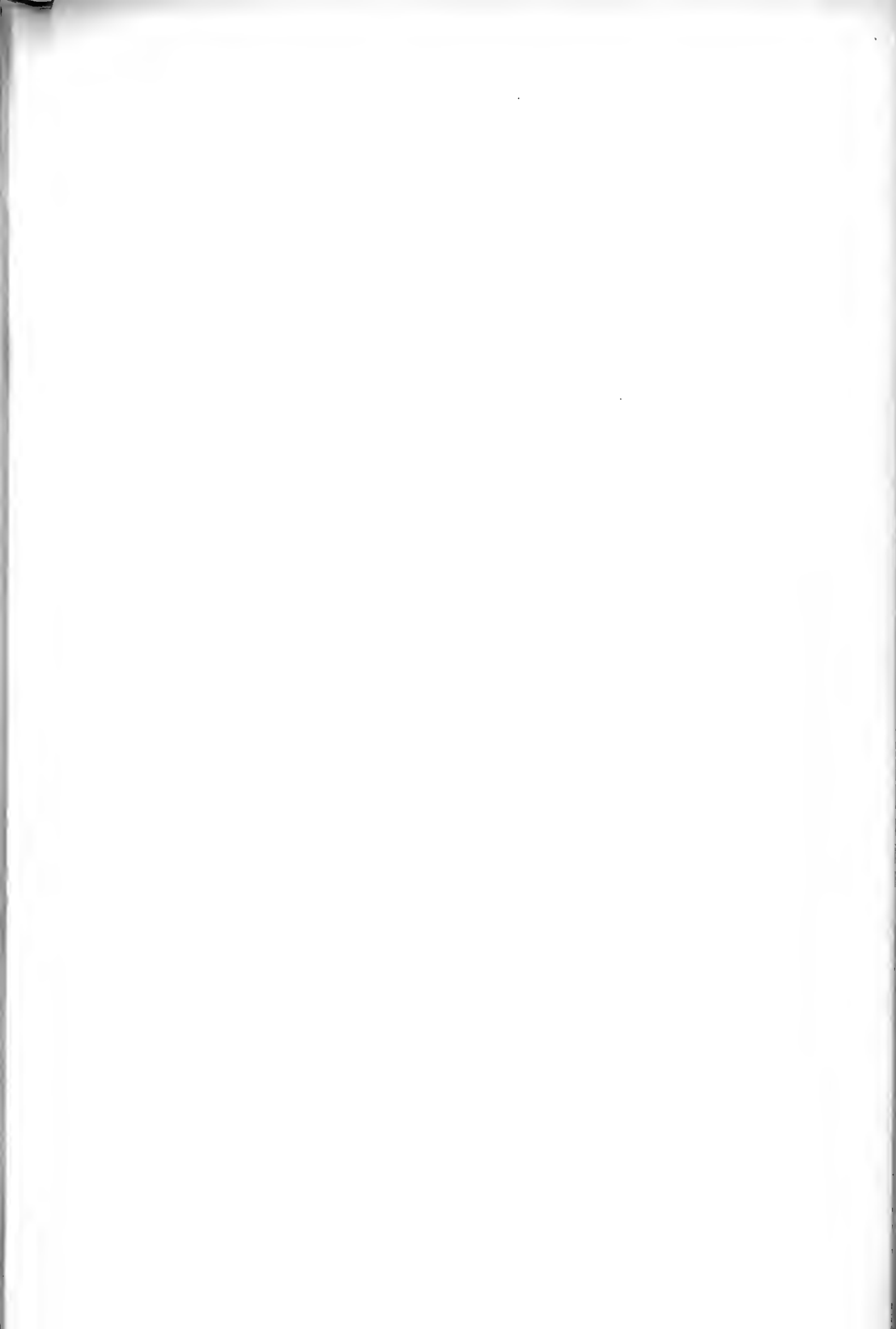
sand and gravel of considerable thickness overlying the limestone which rises from beneath on the eastern side, and which is broken off by the great Jordan-Arabah fault against the granitoid and other crystalline rocks, which here form the base of the Edomite range. This gravel has all the appearance of a fluvial, or alluvial, deposit, formed by the streams which in flood time descend from the hills to the east; and it is well laid open to view in one of these streams, which ultimately joins the River Jeib. Between this watershed and the first of the terraces which can, with any degree of certainty, be referred to a lacustrine origin, there is a distance of over twenty miles, and a vertical fall of about 700 or 650 feet; and as our party was scattered over the valley, we could not have failed to detect remains of such lacustrine deposits, if any such existed, above the level of those we encountered at our camp of the 12th December, 1883, at Ain Abu Werideh: at a level approximately that of the Mediterranean, and 1,292 feet above that of the Dead Sea.<sup>1</sup> These horizontal beds of white marl with shells, sand, and shingle, was an entirely new feature to us all; and no doubt remains on my mind that they indicate the highest level to which the waters of the ancient Jordan valley Lake formerly rose.

An admission on my part that the waters of the Jordan valley ever were in connection with those of the outer ocean through the Gulf of Akabah can only be made from the point of view that, during the formation of the Jordan-Arabah line of depression by the displacement of the strata along the great fault, and when the whole region was rising from beneath the waters of the ocean in Miocene times, some such connection existed for a limited period of time; but this epoch in the history of the valley was separated by a long interval from that of the present Dead Sea, even when standing at a level of 1,300 feet above its present surface. From the time that the outer waters of the ocean were dis severed from those of the Jordan-Arabah lake by the up-rise of the land, there is no evidence that there was ever any subsequent connection by means of a stream flowing down from the North into the Gulf of Akabah. The closest approximation which, according to my view, these inner and outer waters ever made towards each other is represented in the sketch-map of that whole region in page 72 of the "Geological Memoir," where a tract of ground of about 40 miles in length, and rising to 700 feet in height, is represented as intervening between their respective borders.

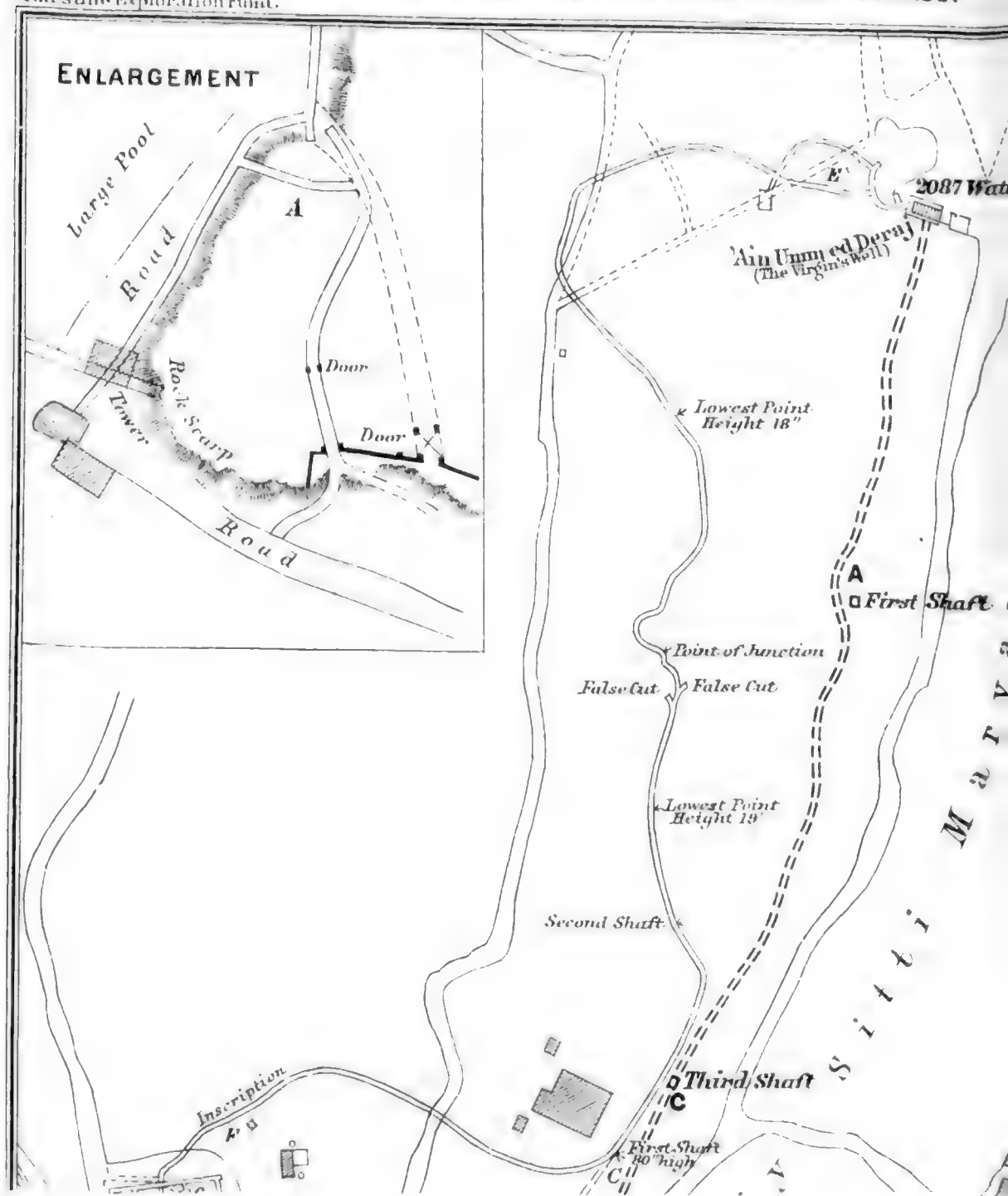
<sup>1</sup> "Mount Seir," p. 99; "Geological Memoir," p. 80.







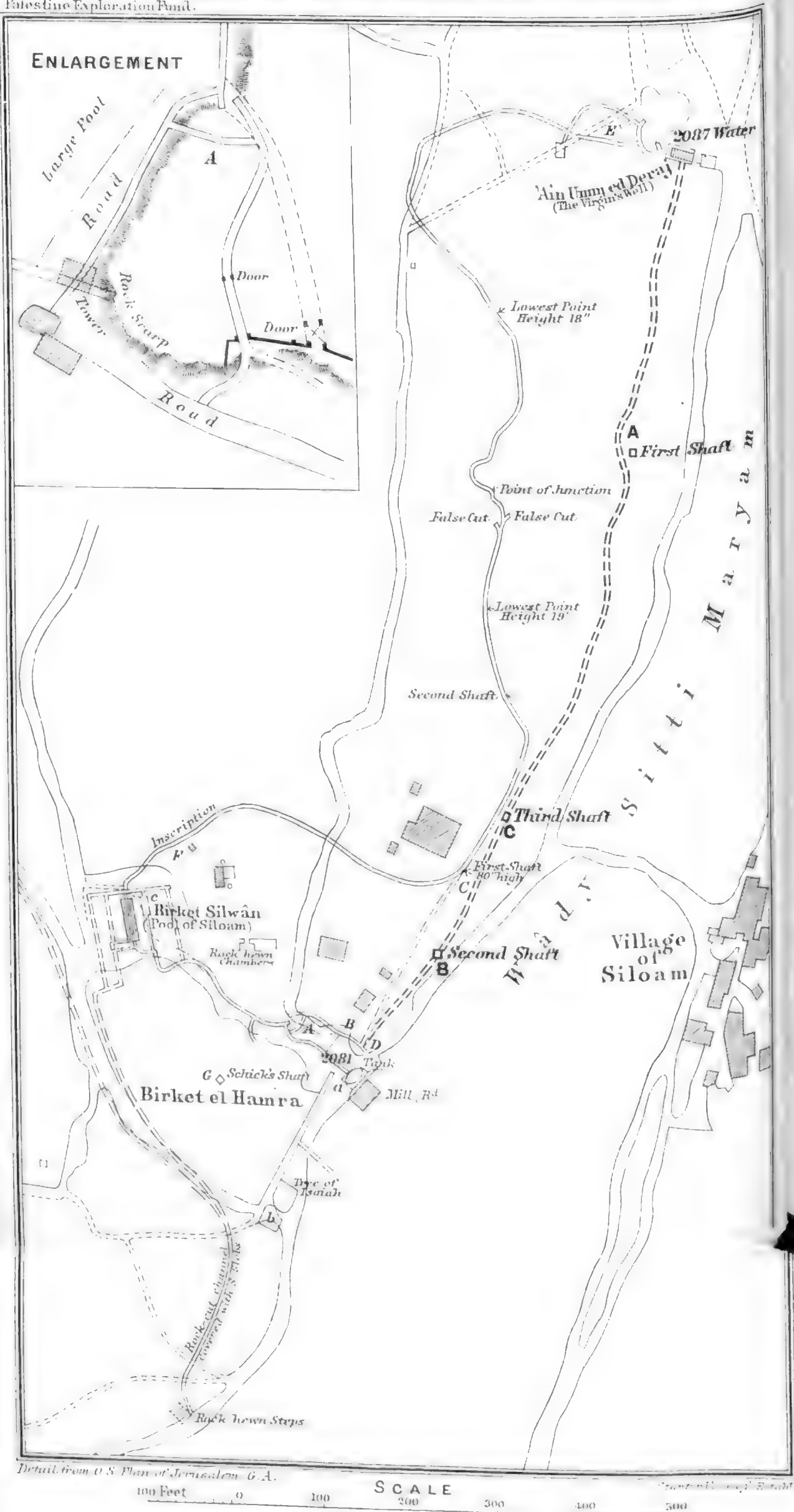
PLAN OF THE AQUEDUCTS AND CONNECTIONS  
RECENTLY DISCOVERED AND SUPPOSED CONTINUATION OF COURSE.  
Palestine Exploration Fund.





# PLAN OF THE AQUEDUCTS AND CONNECTIONS RECENTLY DISCOVERED AND SUPPOSED CONTINUATION OF COURSE.

Palestine Exploration Fund.



## THE WATERS OF SHILOAH THAT GO SOFTLY.

(Isaiah viii, 6.)

FIVE years ago, relying upon the topographical and historical accuracy of the Bible, I predicted with the utmost confidence (*Quarterly Statement*, 1884, 70, 76), that a careful search on the eastern side of Ophel would result in the discovery of an aqueduct which, in the time of Ahaz, conveyed water from the Virgin's Fount (Gihon) to the mouth of the Tyropœon valley. I added that it would be "at a level of about 2,087 feet (but on plan about 2,085), probably a foot or two broad, cut in the rock, perhaps 3 feet deep, and covered with slabs of stone;" and, further, that "as possibly the aqueduct might in some places be destroyed, when it fell into disuse on the completion of the Siloam tunnel, if no result (*i.e.*, successful result) attended the first attempt, a second or even a third ought to be made at some other part of its course." Taking Sir Charles Warren's rock-contours as my guide, I also indicated its course on a plan; and on a later plan of March 19, 1886, marked several spots for examination.

The Executive Committee very kindly took up the proposal that a search should be made, put the matter into Mr. Schick's hands, and in *Quarterly Statement*, 1886, 197, printed his report of the complete success of his excavations.

He states that he sunk three shafts. At the first (A on his plan), he found that "at a height of 2,064 feet above the sea there is no rock." The results of the second shaft, B., seem to me ambiguous. He next made a third shaft, C., hoping to strike the well-known aqueduct to Siloam, at some point where he thought the roof was not solid rock, but covered with stones. In this opinion I cannot agree. However, all ended well.

He says (1886, 199): "At 20 feet the rock was found, and to our joy, the rock-hewn channel also (*i.e.*, the conjectural, not the known one). It is 1 foot 10 inches wide, 4 feet 3 inches deep, both sides cut down perpendicularly, and the bottom round, at a level 2,088 feet above the sea. On the top of the sides there were grooves, 7 inches deep and 8½ inches broad, to take the covering slab, which was no longer in its place, and hence the conduit was full of earth."

Even after two years I must own to being extremely pleased at this discovery, especially as I had informed Mr. Besant that if the aqueduct were honestly looked for and not found, I would give up the Jerusalem controversy. This true solution of the Shiloah difficulty has taken much time and trouble. To Vitringa, as Thrupp points out ("Jerusalem," 140), we owe the correct interpretation of Isaiah viii, 6; and besides these and others, Major Conder (1883, 139; 1884, 241, 243); and Professor Sayce (1883, 211; 1884, 174), have assisted by their very objections; for in answering them (1885, 60), I saw the more clearly that I had got hold of the truth, and therefore again pressed for the search to be made.

Let me now dispose of some further objections which the former has thought good to offer, and next point out the value of this discovery.

Major Conder (1887, 104), says : "The investigations of the supposed second aqueduct to the Virgin's Pool do not seem to have led to the proof of its existence, nor do I think it at all likely that a second aqueduct would have been cut, as there could not have been any apparent use for it. . . . Shaft C. showed a surface channel, of which there used to be many on this hill, but it is not shown to have gone to the Virgin's Pool."

Here I would ask—

1. If the remains described above do not prove the existence of an aqueduct, what possible remains would ?

2. As the present use of the present rock-hewn tunnel is to convey water from the Virgin's Pool to the Tyropæon Valley, so the past use of the newly-found aqueduct was to do the same, *before* the rock-hewn tunnel was made or ever thought of.

3. The next objection about "surface" seems to me more superficial than the aqueduct, which is buried quite 20 feet. If Major Conder means that the channel had not a roof of solid rock, I reply, Of course not, for that is just what was *not* wanted (1884, 76) ; but if he means it is still so near the surface (only 20 feet below !), that it cannot be as ancient as the time of Ahaz, then I must ask why would he attribute (1887, 106 ; 1884, 26) to Hezekiah the aqueduct named in *his very next paragraph*, on p. 104, 1887. Is that aqueduct 20 feet below the surface ? And if so, how much more depth is required for Ahaz than for Hezekiah. To me, 20 feet seems depth enough of soil for any antiquity in this part of Ophel ?

But, before dismissing his aqueduct, I would ask, would it not be absurd in Hezekiah first to stop the upper outlet of Gihon (Virgin's Fount), and to bring the waters, with immense labour, beyond the reach of the enemy, through the Ophel Hill to the Pool of Siloam, and then to convey them onwards, *outside* the walls, and so *not beyond* his reach, in a *surface* channel (his is such as much as mine) covered with slabs, having slits (1882, 130) here and there giving access to the waters—a channel, be it noted, running east and west according to Major Conder's plan (1884, 21), but north and south on Mr. Schick's (1886, 199). In other words, Major Conder makes Hezekiah's object to have been to prevent Sennacherib tasting the waters of Gihon *merely before* they reached Siloam ; after that he might drink *ad libitum*. This absurdity inevitably follows his interpretation of 2 Chron. xxxii, 30, in which he makes the city of David to be the Upper City on the south-western hill.

4. While the aqueduct has not been *actually* traced to the Virgin's Fount, it must, like the Siloam tunnel, have led from it, as "there is nothing to lead us to suppose that any other supply of living water existed at a former period" at Jerusalem (Conder's "Handbook," 334). I hope, however, these objections will lead the Committee to trace the conduit to its end in both directions.

HARAM WALL

OPHEL WALL

PRESENT CITY WALL

2279

2229

2179

2270

2229

Supposed bed of the Valley of Hinnom Path

The Castle of Zion, I. E.  
The City of David

Y

THE VIRGIN'S WELL

Supposed bed of the Kidron

Y marks  
the probable  
position of the  
Sepulchres of  
David

Path

Rock hewn conduit

Conjectural aqueduct for the waters of Shiloah

POOL OF  
SILOAM

Scale

0 50 100 200 FEET

## The CITY OF DAVID

Rock Contours  
by

Sir C. Warren R. E.



The discovery of this aqueduct seems to be most valuable, because—

1. It gives us a glimpse of the wonderful accuracy of the sacred records, since a brief notice in Isaiah has enabled us to recover an aqueduct disused for 2,600 years, whose very existence was denied by historical critics.

2. The terms Shiloah, Siloah, and Siloam can now, without any difficulty whatever, be applied to one spot, at the south of Ophel.

3. Once more Ophel, west of the Virgin's Fount, is found to be the site of the city of David, for the waters of Shiloah (*i.e.*, aqueduct) must, as Thrupp pointed out, have flowed from the city of David, and this (Schick's) aqueduct can only have led from the very same source as the Siloam tunnel does at the present day, *viz.*, from the Virgin's Fount, *i.e.*, Gihon (2 Chron. xxxii, 30).

4. There is no longer any room whatever for doubt as to the date of the Siloam tunnel. Every difficulty has been removed. It was certainly Hezekiah's work (1883, 106). The same may also be said of the inscription.

5. In my opinion Schick's aqueduct is to be attributed to Solomon.

6. By this discovery an impetus ought to be given to excavation work at Jerusalem.

We have not now to dig at a venture. Calculations may be made to a nicety beforehand. An unknown quantity, too, has been eliminated from the problem of discovering the sepulchres of David, or, rather, its value has been found. Readers of these pages may remember how uncertainty as to the position of "the Pool of Siloam" (1883, 155) and "the pool that was made" has more than once marred my conjectures as to the approximate position of David's tomb on the part south of the Haram area.

Now, however, a doubtful point *finally settled*, gives another *fixed and known point* from which to make a further advance towards solving the great question of the precise position of the Royal Sepulchres.

Encouraged, therefore, by the successful find of "the waters of Shiloah," I would again put before the Executive Committee of the Palestine Exploration Fund a proposal that a search should be made for the sepulchres of David. I do not ask them to believe me, and I cannot in this matter speak, as in the former case, with "the utmost confidence" of succeeding; but, after two years' reflection, I see no change that I should wish to make in the plan and explanation given in *Quarterly Statement*, 1886, 33. A search (on a line east and west) on the eastern side of Ophel must, in my opinion, reveal traces of the city wall, and a further search based on this would, I believe, be rewarded by most astonishing results, *viz.*, the discovery of ancient tombs which must be royal.

Perseverance, however, and money, too, will probably be needed to recover the sepulchre where David's dust "rests in hope" (if Matt. xxvii, 53, admits of it), the magnificent catacombs where Solomon "lies in his glory," the *loculus* (bed) of Asa, "filled with divers kinds of spices"—in short, the *one* intact monument of the kings of Judah. I would not for

a moment ignore any proposed *bond fide* site for the sepulchres of David, adverse to my own. It is however needless to consider Mr. St. Clair's (1888, 49, 288) site with all the details of his plan, until he draws his southern wall, not on the line of the present wall, but so as (1) to take in the towers discovered by Mr. Maudslay at the south-west corner of the upper city, (2) to pass close to the Virgin's Fount, and (3) to be sufficiently near to the Pool of Siloam as to defend it. According to Mr. St. Clair's plan, the elaborate works connected with the two latter had nothing to do with Jerusalem, and were useless. This is incredible.

W. F. BIRCH.

October 25th, 1888.

## THE VALLEYS AND WATERS OF JERUSALEM.

THE Hebrew language furnishes a most useful key to the topography of Jerusalem, inasmuch as it possesses different words to describe valleys of different kinds, and also invariably applies the same word to the same valley. The translators of the Bible apparently overlooked this peculiarity; but it is strange that the Revisers should have strayed still further by translating identically the same words in one place "the king's *dale*," and in another "the king's *vale*."

Thus the reader of the English translation, by being deprived of the topographical light which the original contains, is led blindfold among the three valleys of Jerusalem, with two chances to one of his mistaking where he is.

At the suggestion of one of the Executive Committee, I propose to lay before the reader a simple statement as to these valleys and the passages in the Bible where they are named.

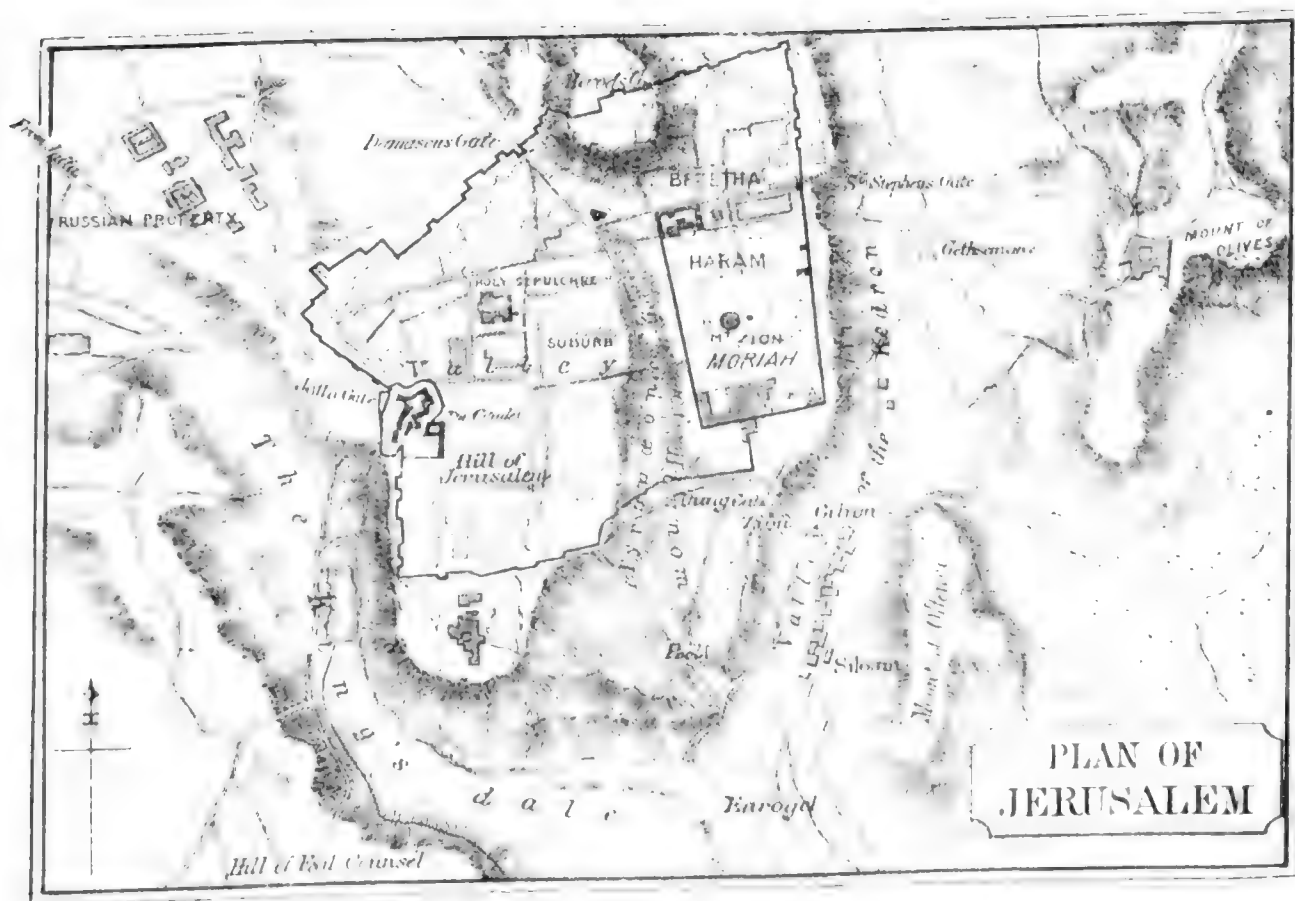
To those who will condescend to use this key instead of their own fancy, Jerusalem topography will lose most of its difficulties, and points which may still escape me may become clear to others.

Jerusalem is bounded on the east by a valley running from north to south. This is universally admitted to be that named in the Bible as the brook Kidron.

On the west and south it is bounded by an L-shaped valley, joining the former at its southern end, whence the two form one valley leading to the Dead Sea.

The space enclosed between these two, forming the site of Jerusalem, is further divided by a central bifurcated or Y-shaped valley, of which the lowest limb joins the point of contact of the two former valleys, while the left branch of the Y runs almost east and west, and the right branch northwards. Further, Jerusalem is divided in such a way that the area to the right of the Y is only about one-quarter of the whole.

The first, or eastern, valley is in Hebrew called *Nachal*, or the brook its full title being the brook Kidron.







The second, or south-western, valley is called *Emek*, or the Dale, with various additions.

The third valley (*i.e.*, the left and lowest limb of the Y) is called *Ge*, or the valley of Hinnom, the last word, Hinnom, being very seldom omitted.

If the reader asks, as he has a right to ask, "Do all writers on Jerusalem believe all this about the valleys?" then I must reply, "Certainly not."

Theories have been formed and advocated in ignorance of the above-named *key*, and, as General Gordon rightly observed (*Quarterly Statement*, 1885, 81), "A man, under his own name, cannot go right-about-face all at once." My experience is that he will hardly go at all sooner or later. I have explained in *Quarterly Statement* (1878, 178; 1882, 56) how I got into the light, or rather how light got into me, by a mere accident, and how the Jerusalem fog which still envelops so many lifted and the great outlines of Jerusalem burst upon my view in wonderful distinctness, as soon as ever I admitted that Nachal = eastern valley, Ge = central valley, Emek = south-western valley. My faith in this key was confirmed beyond a shadow of a doubt when, by the use of it, I found that Jer. xxi, 13, 14, "I am against thee, O inhabitant of the valley [emek] and of the rock of the plain [mishor], saith the Lord: ye which say who shall come down against us," had *nothing whatever to do with Jerusalem*, as hitherto universally supposed.

The people of Jerusalem did *not* live in the *emek*, and the word *mishor* is technically applied to the upland downs on the *east* side of the Jordan. The very expression used by Rabbath-Ammon in Jer. xlix, 3, 4, "Who shall come unto me," answering so closely to "Who shall come down against us," is enough to show to the unprepossessed reader that the capital of the Ammonites is addressed in Jer. xxi, 13, just as Jerusalem is in the twelfth verse; while Ezek. xxi, 20, throws further light on the question.

Here, again, I must confess with sadness that writers, learned and unlearned alike, still go on in error, preferring to do violence to Hebrew usage rather than to revise what they have once written (1878, 189; 1882, 59). I must also add that I first learned from Mr. Schick (1884, 185) that I had been forestalled by Schwarz in perceiving that the central, *i.e.*, the Tyropeon valley, was the valley (*ge*) of Hinnom. Possibly his discovery was rejected by others because he went on to say that the south-western valley, *emek* (still, I grieve to say, commonly taken to be the *ge*, or valley of Hinnom) was the valley of Rephaim. Anybody could see that it was *not*, and that the Philistines could never have *spread* themselves in such a small place (2 Sam. v, 18, 22; xxiii, 13).

Now as to the valleys.

#### *Nachal*, OR THE BROOK KIDRON.

2 Sam. xv, 23. The king passed over the brook Kidron.

St. John, xviii, 1. Jesus went forth with his disciples over the brook Kidron.

- 1 Kings, ii, 37. Passest over the brook Kidron.  
 1 Kings, xv, 13. Asa burnt her image at the brook Kidron.  
 2 Kings, xxiii, 4. Josiah burned them without Jerusalem in the fields of Kidron.  
 2 Kings, xxiii, 6. Unto the brook Kidron and at the brook Kidron.  
 2 Kings, xxiii, 12. Cast the dust of them into the brook Kidron.  
 Jer. xxxi, 40. All the fields unto the brook Kidron.  
 Sometimes Kidron is omitted, and *Nachal* only used.  
 Nehemiah (ii, 14, 15), after passing the King's pool, says, "Then went I up in the night by the brook."  
 2 Chron. xxxiii, 14, R. V. After this Manasseh built an outer wall to the city of David on the west side of Gihon, in the valley (*nachal*, i.e., brook).

Here the original contained light, while a vague translation has produced darkness, in which writers on Jerusalem are still groping. This verse by itself showed that Gihon was on the east of Jerusalem, and the city of David close to it, on the west side of Gihon; but because the A. V. gave *valley* instead of *brook* (and the R. V. does just the same), Dr. Robinson was led astray, and Sir Charles Warren triumphantly claims that his north-westerly site for Zion "is the only site which will render intelligible" this verse ("Temple," 35). Put *brook* for *valley*, and the verse is seen at once to be diametrically opposed to his view. He has long admitted that the Book of Nehemiah seems to place the city of David on Ophel, but here we have his favourite passage in Chronicles doing the very same thing. It would have been most unsatisfactory if Nehemiah had not been consistent with Chronicles.

On the invasion of Sennacherib, Hezekiah (2 Chron. xxxii, 4) gathered much people together, and they stopped all the fountains, and *the brook* (*nachal*) that flowed through the midst of the land, saying, why should the kings of Assyria come and find much water. Here the A. V. is better than the R. V., for the former gives the marginal reading, "overflowed."

What then was *the brook that overflowed*? Heavy rain would make a stream in any valley. But in this case why stop only *one*? Now the Virgin's Fount in the Kidron valley is partly an intermittent spring. It seemed, therefore, to me ten years ago (*Quarterly Statement*, 1878, 181) that this spring was referred to, since it is in the *nachal*, and *overflows* at irregular intervals. The recent discovery of Schick's aqueduct, which carried these waters to the mouth of the Tyropæon valley, showed, however that the waters from Gihon, even in the time of Ahaz, were not allowed to overflow down the Kidron, while the flowing along the aqueduct certainly did not answer to flowing "through the midst of the land."

We (writers) have been for fifty years needlessly indulging in conjectures when all along any ragged urchin at Jerusalem could answer off-hand the question, "Where is the brook that overflows through the midst of the land?" Dr. Robinson thought it flowed down the south-

western valley; Sir C. Warren, writing of the central valley, exclaims ("Underground Jerusalem," 70, 322, 331), "How tantalising to have found the *brook*, but to be debarred pursuing it up to its source!" Nevertheless the brook has been overflowing almost every year. Dr. Robinson notes it and Sir C. Warren saw it, and I also; and yet no one has recognised it. What is more, its periodical flow is actually tabulated in these very pages (*see* 1883, 33), and as no one should overlook it, it is headed "TABLE IX. The overflow of Beer Ayûb." Yet it has taken me ten years to find it out and this while the "Land and Book," 656, etc., and "Jerusalem Recovered," 258, have brought closely together the mention of the brook that overflowed, and the overflow of Joab's well and the long tunnel, so that one ought long ago to have perceived the connection between them.

Major Conder says, "The rising of the waters is held as a feast by the inhabitants of Jerusalem, who may be seen walking beside the water or sitting in the valley in numbers on a bright winter day when the water is flowing. Men, women, and children here picnic all day" ("Memoirs, Jerusalem," 371, and "Land and Book," 658).

After heavy rains the water from the lower strata of rock finds an outlet up the shaft of the well. I do not know the age of the well, and, therefore, do not say it existed in the time of Hezekiah. Sir Charles Warren, however, discovered one entrance to three staircases a little north of the well—one of them leading to a semi-natural cistern in the rock, where a natural cleft was also visible. This staircase had evidently been cut into at a later date, but in its original form it had once been built up by a cross wall, and at the bottom of the wall a hole or duct was left 6½ by 4 inches, and on the northern side a stone plug to fit and 12 inches long, was found in it. Why? here is the *very plug* Hezekiah put in (I don't mean with his own hand) when Sennacherib invaded Judah. Talk of the Bible not bearing historical criticism! It is the critic who cannot bear criticism. Afterwards the *plug* was no longer needed, when the 1,800 feet aqueduct from the cistern was made down the Kidron.

It seems to me that the above staircases must have been made by the Jebusites, and that this source of water is to be identified with En-rogel (Josh. xv, 7, xviii, 16), just as in Gen. xxiv, 11, 20, mention is made of a *well* (*beer*), and of Rebekah going *down* to the *spring* (*vain*, 16, 13). What an excellent hiding-place Jonathan and Ahimaaz (2 Sam. xvii, 17) must have had here in these staircases and cleft, the reader may learn for himself from Sir Charles Warren's Letters, pp. 140, 152, and the "Jerusalem Memoirs," 372.

#### Ge, OR THE VALLEY OF HINNOM.

Josh. xv, 8 (from En-rogel). The border went up by the valley of the son of Hinnom.

Josh. xviii, 16. The border went down to the uttermost part of the mountain that lieth before the valley of the son of Hinnom, which is in

the vale of Rephaim northward; and it went down to the valley of Hinnom, to the side of the Jebusite southward, and went down to En-rogel.

Neh. xi, 30. From Beersheba unto the valley of Hinnom.

2 Chron. xxviii, 3. Ahaz burnt incense in the valley of the son of Hinnom.

2 Chron. xxxiii, 6. Pass through the fire in the valley of the son of Hinnom.

2 Kings xxiii, 10. Josiah defiled Topheth, which is in the valley of the children of Hinnom.

Jer. xxxii 35. High places of Baal, which are in the valley of the son of Hinnom.

Jer. vii, 31, 32. Topheth, which is in the valley of the son of Hinnom.—Behold the days come, that it shall no more be called Topheth, nor The valley of the son of Hinnom, but The valley of Slaughter, for they shall bury in Topheth till [or because] there shall be no place to bury.

Also xix, 6.

Jer. xix, 2. Go forth unto the valley of the son of Hinnom, which is by the entry of the gate Harsith (Margin, the gate of Potsherds).

The A. V. unfortunately renders Harsith by east. An *east* gate at Jerusalem must lead to the *nachal* (brook Kidron), and as the valley (*ge*) of Hinnom is said to be near the above wrongly styled *east* gate, Sir Charles Warren, taking the *nachal* and *ge* to be one and the same, has in a mistake of the Authorised Version, found support for his wrong position of Zion, the city of David (1870, 344). This is much to be regretted, as it is hard to go right-about-face.

Occasionally the valley of Hinnom is simply described as the valley (*ge*), and serves as a title for a gate near it.

Neh. ii, 13. I went out by night by the valley gate.

Neh. iii, 13. The valley gate repaired Hanun, &c.

2 Chron. xxvi, 9. Uzziah built towers at the valley gate.

From the valley (*ge*) we have in the N. T. the term Gehenna as a place of torment.

The lowest limb of the Y is the Tyropæon valley of Josephus, dividing the upper city on the hill (*gibeath*) of Jerusalem (Is. x, 32, xxxi, 4) on the west from the lower city or Acra on Ophel (so called) on the east. On part of the latter stood Zion, the city of David, while the high part of the hill on the north was called the Mount (*har*) of Zion (Is. x, 32, xxxi, 4), Mount Moriah, and later, the Mount of the House (2 Chron. xxxiii, 15). At times, however, in the Psalms and Prophets, Mount Zion, Zion, and Jerusalem seem to be used as equivalent terms for the whole city.

#### *Emek*—THE DALE.

Gen. xiv, 17, R. V. The king of Sodom went out to meet him (Abram) at the vale of Shaveh (the same is the King's *Vale*). And Melchizedek, &c.

2 Sam. xviii, 18. Absalom in his lifetime had taken and reared up for himself the pillar which is in the king's *dale*.

This gratuitous variation in R. V. is reprehensible.

Josephus, with better judgment, says that Melchizedek was king of Jerusalem, and that Absalom's pillar was two furlongs from Jerusalem. It seems to me absurd to think either that these two valleys are not identical, or that Absalom had prepared his tomb on the east side of the Jordan, or near Shechem, where some learned people wrongly think Abram met Melchizedek. Abram's natural road was, as at present, past Jerusalem, and that city was the obvious place at which the king of Sodom would meet him.

Jer. xxxi, 40. The whole valley of the dead bodies and of the ashes and all the fields unto the brook Kidron.

The valley thus described has been taken to be the south-western valley, commonly called the valley (*ge*) of Hinnom. When, however, I took the central valley to be the valley (*ge*) of Hinnom, and then came to examine this passage in the Hebrew, and found that as this south-western valley ought not to be called *ge*, so actually it *was not called ge but emek*, I saw how many difficulties ignorance makes for itself, and that while the original is very distinct and precise, the laxity of translations has produced confusion and difficulties which once seemed insuperable.

Joel, iii, 2, 12. I will bring them down into the valley of Jehoshaphat . . . . Come up to the valley of Jehoshaphat (Margin, the Lord judgeth).

If the reference here is to any valley at Jerusalem, it is certainly *not* to the *eastern* valley or *nachal*, commonly but wrongly named the valley of Jehoshaphat. The use of *emek* shows that only the south-western valley can be referred to. Thrupp ("Jerusalem" 214) says, "the allusion in this chapter to the winepresses points to where the king's winepresses stood (south-east of Jerusalem), and the metaphor of the harvest conducts us further westward to the cornfields of the Plain of the Rephaim." Hence he concludes that the ravine of the Kidron cannot be exclusively intended. I may, however, observe that "the winepresses" and "the cornfields" are exactly the eastern and western limits of our *emek*.

Jer. xxi, 13. Has been shown above not to refer to Jerusalem.

Isaiah, xxii, 1-7. Possibly does not refer to Jerusalem ("Spk. Comment."). Our key, however, passes smoothly the two wards "valley (*ge*) of vision," and "thy choicest valleys (*emek*)," *e.g.*, the king's *dale* and the valley (*emek*) of Rephaim.

In support of the south-western valley being the king's *dale* (*emek*) I should like to point out that close to its eastern extremity, where it joins the *nachal*, we have the *king's* winepresses (Zech. xiv, 10), the king's pool (Neh. ii, 14) and the king's garden (Neh. iii, 15 ; 2 Kings, xxv, 4 ; Jer. xxxix, 4 ; lli, 7).

*Ain*—SPRING.

As to the waters of Jerusalem little is here to be said. Evidently on the west there was a spring called in Neh. ii, 13, "the dragon's well" (really spring, *ain*) answering probably to the serpents' pool of Josephus (Wars, v, iii, 2). This *ain* is no longer visible.

The Virgin's Fount is undoubtedly Gihon (1 Kings i, 33, 38, 45 ; 2 Chron. xxxii, 30 ; xxxiii, 14). Major Conder has done good service by strenuously maintaining this (1883, 106).

I regret, however, that he feels compelled by M. Ganneau's discovery of the Arabic *Ez Zehwele*, to maintain that En-rogel is identical with Gihon. Enrogel was certainly the same as or near Joab's well. The argument that the last named is a *beer* (well) not an *ain* (spring), hardly proves anything ; for Jacob's well in John iv, 6, 11, is called both  $\pi\eta\gamma\eta$  and  $\phi\pi\acute{\epsilon}\alpha\pi$ . I have observed already that in Gen. xxiv, in Rebekah's story, *beer* and *ain* are both mentioned twice, and the water supply obtained by means of the staircase near Joab's well would certainly be called an *ain* (spring). Further, it is absurd to suppose (1) that Adonijah would hold his revolutionary feast under the very windows of the royal palace on Ophel, and (2) if he had, that David would ever send Solomon to Gihon, almost into the hands of his enemies (M. Ganneau gives the distance between Zehwele and the Virgin's Fount as about 60 metres = 66 yards, 1870, 252), and (3) that being so near to Gihon, Adonijah and the rest of the conspirators should know nothing of what had gone on (1 Kings i, 41) seventy yards off, until Jonathan rushed in to tell them.

Of Arabic, happily, I am ignorant, and so am unmoved by the merits of *Zehwele* ; but I do know that for the *stone* of Zoheleth, the Bible uses *eben*, and I cannot find there a single instance in which it is applied to a *cliff*, such as *Zehwele* is attached to ; while I can give many instances in which it means a moveable stone, which *Zehwele* certainly is not. Perhaps some friend of this Arabic word will produce an instance from the Bible, of *eben* meaning a *cliff*.

Lastly, "The Land and the Book," page 659, points out the fittest place and time for Adonijah's conspiracy, viz., near Joab's well, when *the brook* was overflowing, so that the holiday makers there would find themselves entrapped into the rebellion ere they were aware of it, like the two hundred men who went with Absalom to Hebron in their simplicity. (2 Sam. xv, 11).

W. F. BIRCH.

## EN-ROGEL, AND THE BROOK THAT OVERFLOWED.

### THE POSITION.

THE boundary line between Judah and Benjamin fixes the position of En-rogel somewhere towards the south-east of Jerusalem.

Three sites for it have been proposed, viz. (1) the Virgin's Fount, *i.e.*, Gihon; (2) the Pool of Siloam; (3) Joab's Well.

It seems to me that En-rogel cannot be Gihon, because (*a*) two different names can hardly be applied to the same fountain in one story (1 Kings i, 9, 33, 38, 45); (*b*) it is incredible, and not consistent with the sacred narrative, that Solomon was anointed within a hundred yards of Adonijah and his supporters just where David would *not* send him; (*c*) the *cliff* of Zahweileh certainly does not answer to the *stone* (*eben*, a moveable stone) of Zoheleth. Major Conder, taking the identification to be true, proposes (*Quarterly Statement*, 1885, 20) that En-rogel may mean "the spring of the channel," and would derive the name from "the famous rock-cut channel leading from the back of the cave in which the spring rises." A fatal objection, however, is made by H. B. S. W. (184), who observes "that *all* the passages in which the name occurs, relate to a time antecedent to the earliest date hitherto assigned to the rock-cut channel, and two of them mention the name En-rogel as existing *in the time of Joshua*." I must add that Major Conder himself attributes the famous channel to Hezekiah ("Handbook," 339), so that on this point he is divided against himself; and though since 1878 (*Quarterly Statement*, 130, 184) I have maintained that the Jebusites made the channel (it is part of the gutter up which Joab climbed—2 Sam. v, 8; 1 Chron. xi, 6), I cannot admit this site for En-rogel, even in favour of my theory.

2. H. B. S. W.'s (1885, 59) proposal to identify En-rogel with the pool of Siloam falls before his objection above; for no one, so far as I know, has assigned the Pool of Siloam to so early a date as the time of Joshua.

3. The great objections made by Major Conder (1885, 20) against identifying En-rogel with (Bîr Eyûb) Joab's Well have been (1) that it is too far from the cliff of Zahweileh, and (2) that it is not a spring (*ain*) at all. I have pointed out above that (1) is really no objection at all; and (2) is not conclusive, because Jacob's Well at Sychar is called both a spring (*πηγή*) and a well (*φρέαρ*) in St. John iv. Further, in Gen. xvi, 7, 14, the fountain (*ain*) in the way to Shur is identical with the well, Beer-lahai-roi. Again, in Gen. xxiv, 11, 13, 16, 20, 43, 45, we have both *ain* and *beer*, applied to the same source of water. Further, the *well* of Sirah (2 Sam. iii, 26) is identified by Major Conder ("Tent Work," vol. ii, 86) with the present *ain* Sirah. Thus, a spring reached by cutting the rock may, apparently, in the Bible, be called either *ain* or *beer*. To me Joab's Well seems undoubtedly to answer to the required position of En-rogel, but yet not itself to be actually En-rogel, and this brings us to a very interesting subject.



## THE STORY.

Eleven years ago I pointed out (1878, 130) that there must have been a very clever man among the ancient Jebusites. Whether he was Melchizedec or not is uncertain ; at any rate, water was his specialty. I have told how, by the contrivance of "the gutter," he secured for his city an unfailing supply of water, and so enabled Zion, the castle of the Jebusites, to bid defiance to all Israel, until Joab's daring, in conjunction with Araunah's treachery, transferred the impregnable fortress into David's hands. Another benefit which this same Jebusite (I believe) conferred upon his country was the making of En-rogel.

It is probable that in pre-historic times water used, after heavy rains, to issue from the ground near Joab's Well, just as it does now by means of the well, and to flow in a voluminous stream down the valley towards the Dead Sea.

When, in after times, but before the Israelite invasion, the Jebusites found the supply from Gihon (Virgin's Fount) insufficient for their wants, this father of civil engineers prospected for water in the valley (*nachal*, or brook) near the present site of Joab's Well. Intending his countrymen to be able in stormy times to conceal from their enemies the spring he had resolved to find, he cut in the rock, about 75 feet north of the well, the entrance to a staircase discovered by Sir Charles Warren, which, after descending 6 feet to the west, divides into a northern and a southern branch. The northern staircase soon divides in two others ; neither of these last two enabled our Jebusite to find water, and therefore were abandoned, it may be, when the southern staircase gave indications that the excavators were reaching water. A grand day, indeed, it must have been for that primitive civil engineer, when he broke into the grotto or subterranean cistern marked west of Joab's Well ; and if nature had never hereabouts forced for its waters an outlet to the surface, tremendous must have been the excitement in "the torpid little town of Jebus," when tidings came that a strong stream of water was pouring forth from En-rogel ; in other words, that "the brook was overflowing in the midst of the land."

Consciously or unconsciously, some 3,400 years ago, or more, our Jebusite had constructed a periodical Artesian well, and thereby (unless he was anticipated by nature) endowed his city in perpetuity with all but an annual treat of a babbling brook in "the prettiest and most fertile spot around Jerusalem."

If it is allowable to give a Hebrew derivation to the name of a Jebusite spring (though possibly the later name is an equivalent for the older one, just as we have *shaveh* and *emek*), then I would interpret En-rogel as meaning *the spring of searching out*, i.e., the spring that was found by searching out, just as Isaac named one of his wells *Esck*, because they contended with him.

Useful, however, as En-rogel proved to the Jebusites, it was very inconvenient for their fair Rebekahs to have to go down for water through

the long dark staircase and passage ; accordingly from the surface of the valley (or, if the grotto is under the hill, from a cave, like a tomb, in its side) a shaft was excavated to the roof of the grotto, through which (shaft) their vessels could be let down by a cord into the cistern below.

Centuries rolled on, and if the water had ever naturally issued from the surface near En-rogel, the fact was wholly forgotten. The only overflow that the Hebrews who now held Jerusalem ever witnessed was the periodical rushing of the waters up the staircase of En-rogel.

The Bible mentions this fountain in connection with two critical events in the life of David. In the rebellion of Absalom, Jonathan and Ahimaaz remained lurking in or near these staircases ; and afterwards, "by the stone of Zoheleth, which is beside En-rogel," the rebellious Adonijah gave his great feast, doubtless during the overflow of the brook.

Joab's Well itself may have been dug in the reign of Solomon, and deepened at a later date. It was certainly made *after* En-rogel. Possibly the age of its construction may be ascertained from the character of its masonry.

On Sennacherib's invasion "much people was gathered together who stopped all the fountains and the brook that overflowed through (or in) the midst of the land." Now, at last, Hezekiah reaped the fruit of the Jebusite's forethought. Covering up the entrance to Gihon he was able himself from within the city of Jerusalem to draw its waters by means of the gutter. Similarly it was easy to conceal all traces of En-rogel ; but to stop "the brook that overflowed" proved in the end to be a work of extreme difficulty and extraordinary magnitude. At first, at a distance of 44 feet from the grotto (or cistern), he blocked up the rock-cut passage by "a masonry wall, 3 feet thick, and composed of cut stones set in a hard black mortar, apparently mixed with oil. At the bottom a hole or duct was left, 6 $\frac{3}{4}$  inches by 4 inches, and on the northern side a stone plug to fit, and 12 inches long, was found in it" (by Sir Charles Warren in 1870 ; see Letters, pp. 141, 153).

Probably at the same time Hezekiah closed the shaft in the roof of the grotto with the "white stone," observed by this successful explorer (Letters, p. 141). All this was easy enough ; but when the heavy rains came on, it would seem that the waters still issued from the surface, escaping either through some natural fissure in the rock below the soil, or because the shaft above the grotto or the staircase was not watertight. The blocking up of the staircase (or rather its continuation to the grotto) by a *second* wall, seems to imply that suspicion lighted on the last-named passage. However this might be, the attempt was of no use. The brook still continued, as of old, to overflow. Yet Hezekiah and his people were not easily to be thwarted. If the brook would flow, it should certainly not *overflow*.

At an immense expenditure of labour a spacious aqueduct (6 feet high and from 3 feet 6 inches to 4 feet broad) was cut under the western

side of the Kidron valley, starting from the grotto (which was practically the source of the waters), and extending at least 1,800 feet down the ravine.

[To follow this to its end is a work worthy of the Fund and its supporters.]

Now, at last, the brook was stopped. Buried, as it was, 40 or 50 feet out of sight, and beyond hearing the Assyrian could never have found it.

A further attempt seems to have been made to continue this tunnel (or aqueduct) on the same scale northwards. Apparently the staircase was used for carrying out the chippings, but why the last 86 feet of it (*i.e.*, of the staircase which here is really a passage with a slight fall) were not utilised in this extension is to me at present unintelligible. Operations were begun at a point 86 feet from the grotto, and after lowering the floor about 9 feet, a new tunnel was continued north for 148 feet, generally about 3 feet 7 inches wide, and 6 feet high, and then the work was abandoned.

Still, from the southern end of this 148 feet length, a passage was cut to the grotto, apparently to enable the water trickling through into the 148-foot tunnel to flow into the grotto.

The smaller dimensions ("it is only about 3½ feet high" apparently. Letters, p. 142) and irregular course of this connecting link seem to indicate that it was made without much care. At the point of junction (86 feet from the grotto) the old staircase has partly been cut away by this later work, so that here the roof of the passage is 15 feet high. From this point the *link* runs directly under the older passage, and comes out into the grotto, 9 feet below the other and 6 feet to the west of it.

If Joab's Well had been already dug, it too must have been stopped by Hezekiah. If it was not already made, then the excavating of the great aqueduct must have deprived the people of Jerusalem of their greatest treat. After Sennacherib's departure, they must have looked back with many regrets to the happy days when they used to disport themselves among the trees by the banks of the overflowing brook. And never afterwards, until the exit from the grotto was blocked up (which the presence of some large stones in the tunnel and at the bottom of the cistern or grotto seems to indicate was done), or until Joab's Well was either made or reopened, did the lower valley of the Kidron again present the bright and festive scene which must probably have been of almost yearly occurrence since Jerusalem was first inhabited, and certainly since the day that the clever Jebusite presented to his city the famous En-rogel.

#### THE PROOF.

The more congenial task now awaits me of presenting to the critics the proof that my topographical statements are correct.

In "Jerusalem Recovered," 261, Sir Charles Warren writes:—"This tunnel, as we have now examined it, extends from near Bir Eyûb to a point 1,800 feet down the Kedron Valley. It has been judiciously cut

under one side (the west side) of the valley, so that though it is from 70 to 90 feet under the surface of the rock, yet the staircases being commenced to the east (nearer the bottom of the valley), have not to descend by more than 40 to 50 feet. In the 1,800 feet we have cleared out, seven staircases have been exposed; they are about 3 feet wide, and descend at an angle of 35°. At the bottom of some of the staircases the aqueduct is deepened a little, so as to form a shallow pool."

As, therefore, work might have been begun at all these staircases at once, the time spent in making the aqueduct need not have been much longer than that required to make the tunnel between the two staircases most distant one from the other. Still, however quickly executed, the undertaking, by its very magnitude, witnesses to the extreme importance attached to it.

Had it been primarily made as a means of egress from and ingress to the city, the work would have been begun from the city so as to be available for use, as far as it was finished. If such could have been its object, then, as we find it, it would be nothing but a monument of wasted industry and unreflecting folly.

It is clear, however, that it was intended for an aqueduct. In proof of this we have "the little pools at the bottom of some of the staircases," and water in old time must obviously have flowed along it, as it is connected both with a cistern holding water at the present day and also with a passage stopped with a plug. Above all, its great size shows that it was made to admit of a large volume of water flowing along it, and such a flow actually takes place along it at the present day.

Its depth below the nearest surface, "40 to 50 feet," shows that the object was to conceal the waters from an enemy outside the city until they could be conveyed to some point where he could not reach them, probably where they would sink into the ground and so disappear.

We know from 2 Chron. xxxii, 3, that Hezekiah "took counsel to stop the waters of the fountains which were without the city, and that much people was gathered together, who stopped all the fountains and the brook that overflowed through the midst of the land." Be it observed that *only ONE brook, the brook*, is here mentioned.

With the rock, near Joab's Well, once pierced either by nature or by the shaft of the well, or by the rock-cut staircase north of it, the water after heavy rains would inevitably issue forth in a great stream. As it would have been folly in Hezekiah to stop a brook elsewhere and leave this one still overflowing, and as he is only said to have stopped *the brook* (i.e., one, not more), it is obvious that the brook that he stopped must have been the one rising at or near Joab's Well.

That there used to be such an overflow of water *hereabouts in Hezekiah's time* is clear, because (1) En-rogel was already in existence, being mentioned in the time of Joshua; (2) It was not at Gihon; and because, (3) as the boundary line from En-rogel went *up* the valley of Hinnom En-rogel was obviously towards the south-east of Jerusalem.

We have then the following interesting points established :--

1. The *Ain* (spring) in the word En-rogel proves that at or near **this** spot there was a source and supply of *living waters*.

2. The *living waters* prove that the rock was (porous or) pierced by nature or art, so that the waters could pass through.

3. The rock having been thus pierced proves that there would be **an** overflowing brook at times then as now.

4. The great depth and size of the tunnel prove that it was intended to hide and convey away from the enemy a large volume of water.

As Hezekiah is distinctly asserted to have stopped "the overflow **in** g brook," and no one else apparently had both the necessity and ability **for** doing so, the conclusion is inevitable that Hezekiah made the **long** aqueduct owing to the invasion of Sennacherib, or, in other words, **that** 2 Chron. xxxii, 4, must refer to this aqueduct.

The tunnel is continued on the north side of the cistern or grotto **on** about the same level as it is on the south side, and cuts into a passage leading in one direction up to the surface, and in the opposite direction back to the cistern, which (cistern) the passage named reaches at a level nine feet higher than that of the aqueduct.

As this higher passage is now blocked up by a wall containing *the plug*, which (plug) would be useless when the continuation of the aqueduct **had** been made to cut into the upper passage (for then the water could **flow** along the lower passage, and, as it were, take the plug in the rear), **it is** evident that the wall was plugged :—

(1) Before "the connecting link," or lower passage, was made.

(2) Before the long aqueduct was made ; for then the waters could **no** longer rise so high as the plug, as this is 12 or 13 feet above the **bottom** of the outlet aqueduct.

Therefore the staircase (leading down to the plug) being the only out **let** to waters flowing along the plugged passage, was also made before **the** long aqueduct.

But the putting in of the plug could only have been done to **prevent** the water rising up the staircase. Therefore in the plug we have evidence of an earlier attempt to stop the brook before ever the long aqueduct **or** tunnel was made.

The presence of a *plug* instead of a wall, perfectly solid throughout, seems to me to show that the object was to keep the brook from **over** flowing, *only for a time*, as long as it might be desired, and not to *compel* (if the levels required it) the waters when they overflowed, to do **so** through the shaft in the roof of the grotto. If the top of the shaft is lower than the head of the staircase, of course the waters would **issue** from the former naturally. Anyhow, it is clear the plug was not put **in** for any object connected with the shaft.

As the staircase would practically be useless for getting water after Joab's Well was made, I conclude that the staircase was made before **the** well ; for Joab's Well once made, could never have been both stopped and forgotten and its site lost before Sennacherib's invasion, and at **that** time it has been shown that the staircase was already in existence.

As previous to Sennacherib's invasion there was apparently no object in stopping the brook, it seems to me correct to attribute the device of the plug, as well as the making of the tunnel, to Hezekiah.

It is, however, a long step back from Hezekiah to Joshua.

A place where waters naturally issued at times from the ground, might justly be called a spring (*ain*). Therefore the fact that in the time of Joshua En-rogel is mentioned, does not, of necessity require us to admit that the staircase had been made in his time.

The fact, however, that instead of a vertical well (the easiest and surest way of reaching water in the valley) we find a staircase hewn out in such a manner that it might easily be covered up, and that one entrance is made to serve for the branches north and south, seems to me to show that the persons who constructed it contemplated the need of at times concealing it. From the time of Joshua to that of Hezekiah there was no call on the part of Israel to form such a contrivance, and after Joshua's invasion it was too late for the Jebusites to begin to make the staircase. If, therefore, there was no reason whatever for making such a peculiar staircase after Israel's invasion, we must conclude it was made before it, or in other words, it was the work of the Jebusites.

Nor need we think they were not equal to such a work. Centuries before Jacob's deep vertical well had been made near Shechem, and rock-hewn cisterns and tombs were common everywhere. The *gutter*, a still more difficult undertaking, had been already executed in Joshua's time, or soon after; for its existence is really the only thing which can explain the remarkable circumstance that Jebus alone, of the mountain strongholds, remained untaken till the time of David.

As it would be folly to cover up the staircase and leave Gihon (Virgin's Fount) flowing as usual, it follows either (*a*) that Schick's aqueduct (*see* "Waters of Shiloah") was made by the Jebusites, as a means of secreting the waters; or (*b*) that they inhabited Ophel west of Gihon, commanding the latter and having access to it by means of "the gutter," with the corollary that even from David's time Ophel was part of Jerusalem. As (*b*) has been proved beyond fear of refutation (1888, 46), it is superfluous to add 450 years more to the antiquity of the aqueduct by adopting (*a*).

Of two spots—one with nothing specially to mark it, and seldom, if ever, overflowing with water—and the other a living spring with a staircase, and periodically overflowing with water, there can hardly be any question, but that the latter rather than the former would be chosen for a land-mark. Unhesitatingly, then, I assign to the staircase the title of En-rogel.

Therefore I conclude: (1) That the staircase called En-rogel, leading to the grotto, was made by the Jebusites at a date antecedent to Joshua's invasion; and (2) that Hezekiah, on Sennacherib's invasion, put in the plug, and afterwards made the long aqueduct, thus stopping the brook that overflowed.

What changes take place! Once the ancient Jebusite, as an Oriental would, used to enjoy himself at Gihon,

“nunc viridi membra sub arbuto  
Stratus, nunc ad aquæ lene caput sacre.”

Now-a-days, lower down, Thomson (“Land and Book”), says: “I have seen the water gushing out like a mill-stream, some 15 rods south of the well; and then the whole valley was alive with people bathing (? wading) in it, and indulging in every species of hilarity.”

In the future, when the Jews with their money return to the Holy Land, they may spend some of it in “improving” Jerusalem, by making in the Kidron an artificial lake, to fish and boat upon, and illuminated in the evening with the electric light. All that is required is a great dam across the ravine close to “the spring of the fig” (near the end of the aqueduct). An average annual rainfall of 22 inches will do the rest.

In reference to Hezekiah, I have mentioned only Sennacherib and not Sargon, although Professor Sayce, in “Fresh Light from the Ancient Monuments,” credits the latter with a capture of Jerusalem, and connects Is. x, 24-32; and xxii with it. But as (1) Sargon does not claim the capture on the monuments; (2) as Sennacherib does not boast of it in 2 Kings xviii, xix; (3) as the Bible says nothing about it; but rather (4) says (Is. x, 24), “Be not afraid of the Assyrian,” and promises (xxxviii, 6), “I will deliver thee and this city out of the hand of the King of Assyria; and I will defend this city;” it seems to me that one has no excuse for handing over Jerusalem to the tender mercies of Sargon.

W. F. BIRCH.

# THE PALESTINE EXPLORATION FUND.

## NOTES AND NEWS.

THE death of the Rev. J. Leslie Porter, D.D., President of Queen's College, Belfast, removes another of the earliest supporters of this Society, and one of the most distinguished names in Palestine travel. He was born in 1823, and educated at the University of Glasgow first and that of Edinburgh next. In 1849 he went on a mission to Syria, where he remained for five years, taking every opportunity that offered of travelling in the country. On returning to Ireland he was appointed Professor of Biblical Criticism in the Assembly and College, Belfast. He has been since 1879 President of Queen's College, Belfast. Among his works are "Five Years in Damascus," 1855; "A Handbook for Syria," 1858; "The Giant Cities of Bashan," 1865; and many articles in Smith's "Bible Dictionary" and the "Journal of Sacred Literature."

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Herr Schick reports some additional discoveries brought to light during the reconstruction of the carriage road north of the city wall, viz., traces of an ancient wall and towers outside and along the present wall (*see* p. 63).

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He also describes an important discovery of the foundation of a portion of the ancient city wall, the stones having the Jewish draft and similar to those in the Haram wall, whilst the workmen were clearing the ground in the Latin Patriarch's garden near the north-east corner of the city (*see* plan and sections, p. 65).

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Herr Schick continues his report of the cave found last year in the Russian property east of the Church of the Holy Sepulchre; the excavations have been stopped for the time, but will be resumed after Easter (*see* p. 67).



In the present number of the *Quarterly Statement* will also be found an account, with plans and sections, by Herr Schumacher, of the large cave with chambers, cisterns, and tombs, &c., recently discovered under the convent yard of the Sisters of St. Joseph at Nazareth.

Herr Schumacher also describes, with illustrations, some curious remains and antiques that were found at "J'aûni" (near Safed) and at esh-Shejara (on the road between Kefr Kenna and Tiberias).

The Committee have decided to place all their books in the hands of Mr. A. P. Watt, who has been for some years their agent in the "Survey of Western Palestine" and the "Survey of Eastern Palestine." This change, it must be explained, is made solely with a view to the convenience of having everything in the same hands. Subscribers can continue, as heretofore, to take the books from the office. Mr. Watt's address is 2, Paternoster Square.

#### BALANCE SHEET FOR THE YEAR ENDING 31ST DECEMBER, 1888.

| RECEIPTS.                 |        |    |    | EXPENDITURE.              |        |    |    |
|---------------------------|--------|----|----|---------------------------|--------|----|----|
|                           | £      | s. | d. |                           | £      | s. | d. |
| January 1, 1888—          |        |    |    |                           |        |    |    |
| To Balance .. ..          | 215    | 15 | 9  | By Printers and Binders   | 1,057  | 1  | 2  |
| December 31, 1888—        |        |    |    | Maps, Illustrations,      |        |    |    |
| Donations, Subscriptions, |        |    |    | and Photographs..         | 408    | 3  | 5  |
| and Lectures ..           | 2,079  | 13 | 10 | Exploration.. ..          | 283    | 0  | 0  |
| Maps and Memoirs ..       | 380    | 2  | 9  | Stationery, Advertis-     |        |    |    |
| Publications .. ..        | 289    | 3  | 11 | ing, and Sundries         | 71     | 12 | 7½ |
| Photographs .. ..         | 22     | 1  | 10 | Postage, Parcels, the     |        |    |    |
|                           |        |    |    | <i>Quarterly State-</i>   |        |    |    |
|                           |        |    |    | <i>ment, &amp;c...</i> .. | 172    | 7  | 0½ |
|                           |        |    |    | Salaries and Wages        | 260    | 1  | 2  |
|                           |        |    |    | Rent.. ..                 | 121    | 0  | 0  |
|                           |        |    |    | Paid off Liabilities..    | 211    | 3  | 8  |
|                           |        |    |    | Balance in Bank, 31st     |        |    |    |
|                           |        |    |    | December, 1888..          | 402    | 9  | 0  |
|                           |        |    |    |                           |        |    |    |
|                           | £2,986 | 18 | 1  |                           | £2,986 | 18 | 1  |

W. MORRISON,  
*Treasurer.*

#### TREASURER'S STATEMENT.

The year, though by no means barren of discoveries, has been, from the financial point of view, one of printing and publishing results. Our expenditure

shews a total of £452 on Management, £283 on Exploration, £172 on postage; this very heavy item is due to the sending out of publications, &c., from the office; also the postage of the *Quarterly Statement*, which, last year, was included in the printers' account, is this year taken separately: £211 in payment of Liabilities; £1,465 in printing, illustrating, maps, and binding. Reference to the other side of the Balance Sheet will show, however, that half the expenditure in printing and publishing was recovered by the sale of publications. In other words, out of a total expenditure of £2,584 the proportion is as follows:—

|             |    |    |    |    |    |    |    |     |
|-------------|----|----|----|----|----|----|----|-----|
| Publishing  | .. | .. | .. | .. | .. | .. | .. | 409 |
| Management  | .. | .. | .. | .. | .. | .. | .. | 239 |
| Postage..   | .. | .. | .. | .. | .. | .. | .. | 092 |
| Exploration | .. | .. | .. | .. | .. | .. | .. | 149 |
| Liabilities | .. | .. | .. | .. | .. | .. | .. | 111 |

As regards liabilities, these consist chiefly of printers' bills which vary from £100 to £600, and are constantly paid off and as constantly beginning again.

There is also a debt of £450 which we hope to discharge before the next balance sheet is issued.

W. MORRISON,  
*Treasurer.*

For the convenience of subscribers in following out the position of recent discoveries in Jerusalem, a plan of the city, reduced from the Ordnance Survey Plan of Jerusalem by permission, is published with this *Quarterly Statement*.

This plan gives, marked in red, the discoveries made during the last few years. The same plan will be issued in October or January with all modern discoveries marked upon it.

On 26th February, Major Conder read a paper (the same previously read before the Anthropological Section of the British Association at Bath last autumn), on the "Early Races of Western Asia" at the Anthropological Institute of Great Britain and Ireland. The President, Dr. J. Beddoe, F.R.S., occupied the Chair, and in discussion expressed his assent to Major Conder's view as to the Turanian origin of the Hittites. Mr. C. Bertin was present and also gave his assent to the view that the language of the "Hittite" monuments was best studied by comparison with Akkadian. The paper, with illustrations, will appear in the Journal of the Institute.

The First Volume of the Survey of Eastern Palestine, now in the press under Major Conder's editorship, is expected to be ready by the end of April or a little later. The volume will consist of more than 300 pages, quarto, with some 300 illustrations, including 150 drawings of the rude stone monuments.

The edition is limited to 500. The first 250 subscribers pay seven guineas for the three volumes, with an index; subscribers to the "Survey of Western Palestine" are privileged to have the volumes for this sum. The price will be raised, after 250 names are received, to twelve guineas. The Committee *are pledged never to let any copies be subscribed under the sum of seven guineas.* Mr. A. P. Watt, 2, Paternoster Square, is the Sole Agent.

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The Committee announce that they have added to their list of publications the new edition of the "History of Jerusalem," by Walter Besant and E. H. Palmer. It can be obtained by subscribers, carriage paid, for 5s. 6d., by application to the Head Office only. The whole set (*see below*) of the Society's works, including this book, can be obtained by application to Mr. George Armstrong, for 37s. 6d., carriage paid. The "History of Jerusalem," which was originally published in 1871, and has long been completely out of print, covers a period and is compiled from materials not included in any other work, though some of the contents have been plundered by later works on the same subject. It begins with the siege by Titus and continues to the fourteenth century, including the Early Christian period, the Moslem invasion, the Mediæval pilgrims, the Mohammedan pilgrims, the Crusades, the Latin Kingdom, the victorious career of Saladin, the Crusade of Children, and many other little-known episodes in the history of the city and the country.

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The books now contained in the Society's publications comprise an amount of information on Palestine, and on the researches conducted in the country, which can be found in no other publications. It must never be forgotten that no single traveller, however well equipped by previous knowledge, can compete with a scientific body of explorers, instructed in the periods required, and provided with all the instruments necessary for carrying out their work. The books are the following:—

By Major Conder, R.E.—

- (1) "Tent Work in Palestine."—A popular account of the survey of Western Palestine, freely illustrated by drawings made by the author himself. This is not a dry record of the sepulchres, or a descriptive catalogue of ruins, springs, and valleys, but a continuous narrative full of observations upon the manners and customs of the people, the Biblical associations of the sites, the Holy City and its memories, and is based upon a six years' experience in the country itself. No other modern traveller has enjoyed the same advantages as Major Conder, or has used his opportunities to better purpose.
- (2) "Heth and Moab."—Under this title Major Conder provides a narrative, as bright and as full of interest as "Tent Work," of the expedition for the *Survey of Eastern Palestine*. How the party began by a flying visit

to North Syria, in order to discover the Holy City—Kadesh—of the children of Heth; how they fared across the Jordan, and what discoveries they made there, will be found in this volume.

- (3) Major Conder's "Syrian Stone Lore."—This volume, the least known of Major Conder's works, is, perhaps, the most valuable. It attempts a task never before approached—the reconstruction of Palestine from its monuments. It shows what we should know of Syria if there were no Bible, and it illustrates the Bible from the monuments.
- (4) Major Conder's "Altaic Inscriptions."—This book is an attempt to read the Hittite Inscriptions. The author has seen no reason to change his views since the publication of the work.
- (5) Professor Hull's "Mount Seir."—This is a popular account of the Geological Expedition conducted by Professor Hull for the Committee of the Palestine Fund. The part which deals with the Valley of Arabah will be found entirely new and interesting.
- (6) Herr Schumacher's "Across the Jordan."
- (7) Herr Schumacher's "Jaulân."—These two books must be taken in continuation of Major Conder's works issued as instalments of the unpublished "Survey of Eastern Palestine." They are full of drawings, sketches, and plans, and contain many valuable remarks upon manners and customs.
- (8) The Memoirs of Twenty-one Years' Work.—A copy of this book is presented to every subscriber to the Fund who applies for it. The work is a popular account of the researches conducted by the Society during the past twenty-one years of its existence. It will be found not only valuable in itself as an interesting work, but also as a book of reference, and especially useful in order to show what has been doing, and is still doing, by this Society.
- (9) Herr Schumacher's Kh. Fahil. The ancient Pella, the first retreat of the Christians; with map and illustrations.
- (10) Names and Places in the Old and New Testament and Apocrypha, with their modern identifications, with reference to Josephus, the Memoirs, and *Quarterly Statements*.
- (11) Besant and Palmer's "History of Jerusalem," already described.

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The publications for the year 1889, besides those already mentioned, include Schumacher's "Abila" and his "Southern Ajlûn." The former will be ready about the end of April.

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Mr. Guy le Strange's work on Palestine according to the Arabic Geographers is completed in manuscript, and will be published in the autumn. Particulars as to contents, price, &c., will appear in the next number.

Mr. Harper's important work on the Illustrations of the Bible obtained from modern researches and observation, is also in the printer's hands, and will be out in the autumn. Its contents, &c., will be duly announced.

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Work at Jerusalem and elsewhere will be continued as opportunity may offer. Should the long-hoped for Firman be granted, the survey of Eastern Palestine will be renewed.

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Branch Associations of the Bible Society, all Sunday Schools in union with the Sunday School Institute, the Sunday School Union, and the Wesleyan Sunday School Institute, will please observe that by a special Resolution of the Committee they will henceforth be treated as subscribers and be allowed to purchase the books and maps (by application only to the Secretary) at reduced price.

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The friends of the Society are earnestly requested to use the "Memoirs of Twenty-one Years' Work" as a means of showing what the work has been, and what remains to be done.

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The income of the Society, from December 21st to March 20th, inclusive, was—from subscriptions and donations, £550 1s. 10d.; from all sources, £884 12s. 9d. The expenditure during the same period was £1,078 9s. 10d. This amount includes £400 liabilities paid off. On March 23rd, the balance in the Bank was £267 0s. 6d.

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It does not seem generally known that cases for binding the *Quarterly Statement* can be had by subscribers, on application to the office.

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Subscribers are begged to note that the following:—

1. Index to the *Quarterly Statement*, 1869-1880;
2. Cases for Herr Schumacher's "Jaulân;"
3. Cases for the *Quarterly Statement*, in green or chocolate—

Can be had by application to the office at 1s. each.

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Early numbers of the *Quarterly Statement* are very rare. In order to make up complete sets the Committee will be very glad to receive any of the following numbers:—

No. II, 1869; No. VII, 1870; No. III (July) 1871; January and April, 1872; January, 1883, and January, 1886.

It has come to the knowledge of the Committee that certain book hawkers are representing themselves as agents of the Society. The Committee have to caution subscribers that they have no book hawkers in their employ, and that none of their works are sold by any itinerant agents.

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While desiring to give every publicity to proposed identifications and other theories advanced by officers of the Fund and contributors to the pages of the *Quarterly Statement*, the Committee wish it to be distinctly understood that by publishing them in the *Quarterly Statement* they neither sanction nor adopt them.

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As many inquiries have been made about transparent slides, a selection will be made from the photographs of the Society for this purpose. Subscribers wishing to have any are requested to communicate with the Assistant Secretary.

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Subscribers who do not receive the *Quarterly Statement* regularly are asked to send a note to the Secretary. Great care is taken to forward each number to all who are entitled to receive it, but changes of address and other causes give rise occasionally to omissions.

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The only authorised lecturers for the Society are—

- (1) Mr. George St. Clair, F.G.S., Member of the Anthropological Institute and of the Society of Biblical Archaeology.

His subjects are:—

- (1) *The General Exploration of Palestine.*
- (2) *Jerusalem Buried and Recovered.*
- (3) *Buried Cities, Egypt and Palestine.*
- (4) *Buried Cities of Mesopotamia, with some account of the Hittites.*
- (5) *The Moabite Stone and the Pedigree of the English Alphabet.*

Address: Geo. St. Clair, Bristol Road, Birmingham, or at the Office of the Fund.

- (2) The Rev. Henry Geary, Vicar of St. Thomas's, Portman Square. His lectures are on the following subjects, and all illustrated by original photographs shown as "dissolving views:"—

*The Survey of Western Palestine, as illustrating Bible History.*  
*Palestine East of the Jordan.*  
*The Jerusalem Excavations.*  
*A Restoration of Ancient Jerusalem.*

- (3) The Rev. James King, Vicar of St. Mary's, Berwick. His subjects are as follows :—

*The Survey of Western Palestine.*  
*Jerusalem.*  
*The Hittites.*  
*The Moabite Stone and other monuments.*

- (4) The Rev. Thomas Harrison, F.R.G.S., Member of the Society of Biblical Archaeology, 38, Melrose Gardens, West Kensington Park, W. His subjects are as follows :—

- (1) *Research and Discovery in the Holy Land.*
- (2) *In the Track of the Israelites from Egypt to Canaan.*
- (3) *Bible Scenes in the Light of Modern Science.*

## "THE HOLY PLACES OF JERUSALEM."

PROFESSOR HAYTER LEWIS has lately published a book, entitled the "*Holy Places of Jerusalem*,"<sup>1</sup> which may be looked upon as a very distinct evidence of the value of the labours of the Palestine Exploration Fund. Twenty years ago such a work could not have been produced. It has taken many years of exploration to accumulate the data on which this book is based. When the Palestine Exploration Fund began its operations there was great uncertainty about the topography of the Holy City. The writers on the subject before that time had propounded theories, and as these theories were opposed in many cases to each other, it took time to find out which were reliable, and which were not. Progress was made slowly, bit by bit points have been cleared up, and although much yet remains to be done, some of the principal questions have been cleared up, and have ceased to be subjects of controversy. The very names of buildings and places were found to be wrong—such as the "Mosque of Omar," which we now know was built by Abd-el-Malik. To this another example may be added, which has only lately been cleared up. The large hollow at the north end of the Haram has long passed for the "Pool of Bethesda,"—it is so named even in the Ordnance Survey Map. The real Pool of Bethesda has at last been discovered, and a gain to our knowledge has been made. One merit of the book just produced is, that the author has had reliable material to work with. He has also visited Jerusalem more than once to see with his own eyes the places that had been discovered. Add to all this that he has been able to devote many years to the study of the questions connected with the archaeology and architecture of the locality, and being both an architect as well as an archaeologist, the result is a volume which has many merits, and it will be read with the greatest interest by all, and more particularly by those who have devoted study to the subject.

The largest portion of the work is devoted to the Dome of the Rock, and the other buildings of the Haram area. In this the author gives the latest historical material which has been derived from the publication of the Palestine Pilgrims Texts, such as Mukaddasi, who belonged to an architectural family, this connection giving his details about the structures of Jerusalem a peculiar value; he wrote about the year 985 A.D. This author mentions the existence at that date of both the Dome of the Rock and the Holy Sepulchre—this conjunction being one of the facts which has gone far to disprove Mr. Fergusson's theory. As that theory is now untenable, it may be well to quote the final conclusion that Professor Hayter Lewis has arrived at. He says: "I am satisfied, after the most careful study which, as an architect, I have been able to give to the subject—First, that the Dome of the Rock was not built by Constantine, nor for several centuries after him, inasmuch as it is built up of fragments of too debased a character to have been used in buildings erected

<sup>1</sup> "*The Holy Places of Jerusalem*." By T. Hayter Lewis, F.S.A., Emeritus Professor of Architecture, University College. John Murray, October, 1888.



and destroyed before his time. Secondly, that there is nothing to show definitely, in plan, construction, or details, that it is Byzantine, and that there is no reason to suppose that any such building would have been erected on a site which was considered by the Christians to be accursed, or which, if erected before the time of Chosroes, would have survived the destruction wrought by the Jews. As regards the suggestion that it was erected by Eudisia (c. 460), the above observations will apply equally well, except that Sir C. Wilson considers that it does not occupy the site of the Jewish Temple.<sup>1</sup> Thirdly, that there is nothing, either in plan, details, or construction, to disprove the distinct statement made in the famous Cufic inscription, that the Dome of the Rock was built by Abd-el-Melik in 691 A.D. Finally, I must express my full belief that the Dome of the Rock was the work of Arabs, designed for them by a Byzantine or Persian architect, and with Persian or Byzantine workmen, before the Arabs had developed any definite style of their own, and that it was built with the capitals, bases, and columns ready to hand, being derived from the remains of churches and other buildings destroyed by Chosroes and other invaders," pp. 71, 72.

The suggestion that the capitals and other fragments which had been utilized by the builders of the Dome of the Rock are too debased to have been produced before the time of Constantine, is, if I mistake not, a new one, and it is, at the same time, of great force.

Professor Hayter Lewis also deals with the Holy Sepulchre; Jeremiah's Grotto, and the late speculations regarding it as the Site of Calvary; and also with Siloam, and the tunnel which brings water to the Pool from the Umm ed Deraj, or Fountain of the Virgin. The book is very full of beautiful plates, maps, and plans, making every point treated upon clear and distinct.

WILLIAM SIMPSON.

## NOTES ON THE PLAN OF JERUSALEM.

The parts shown in red are the more important of the recent discoveries, the descriptions of which will be found in the *Quarterly Statement* as noted below.

A. Scarped rock, &c., showing line of ancient wall to the south of the city. *Quarterly Statement*, 1875, pp. 7, 34, 81, 86.

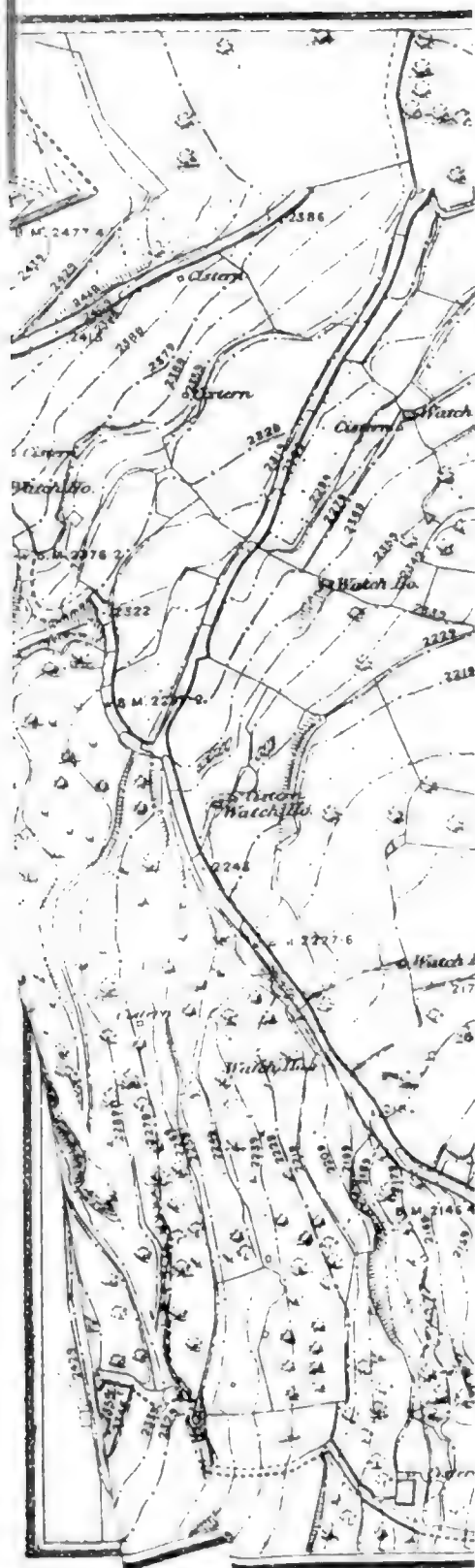
B. Portion of the (supposed) second wall. *Quarterly Statement*, 1886, p. 21; 1887, pp. 23, 218.

C. Ancient wall near house of Latin Patriarch. *Quarterly Statement*, 1889, p. 65.

D D. Old remains outside the north wall of the city. *Quarterly Statement*, 1889, p. 63.

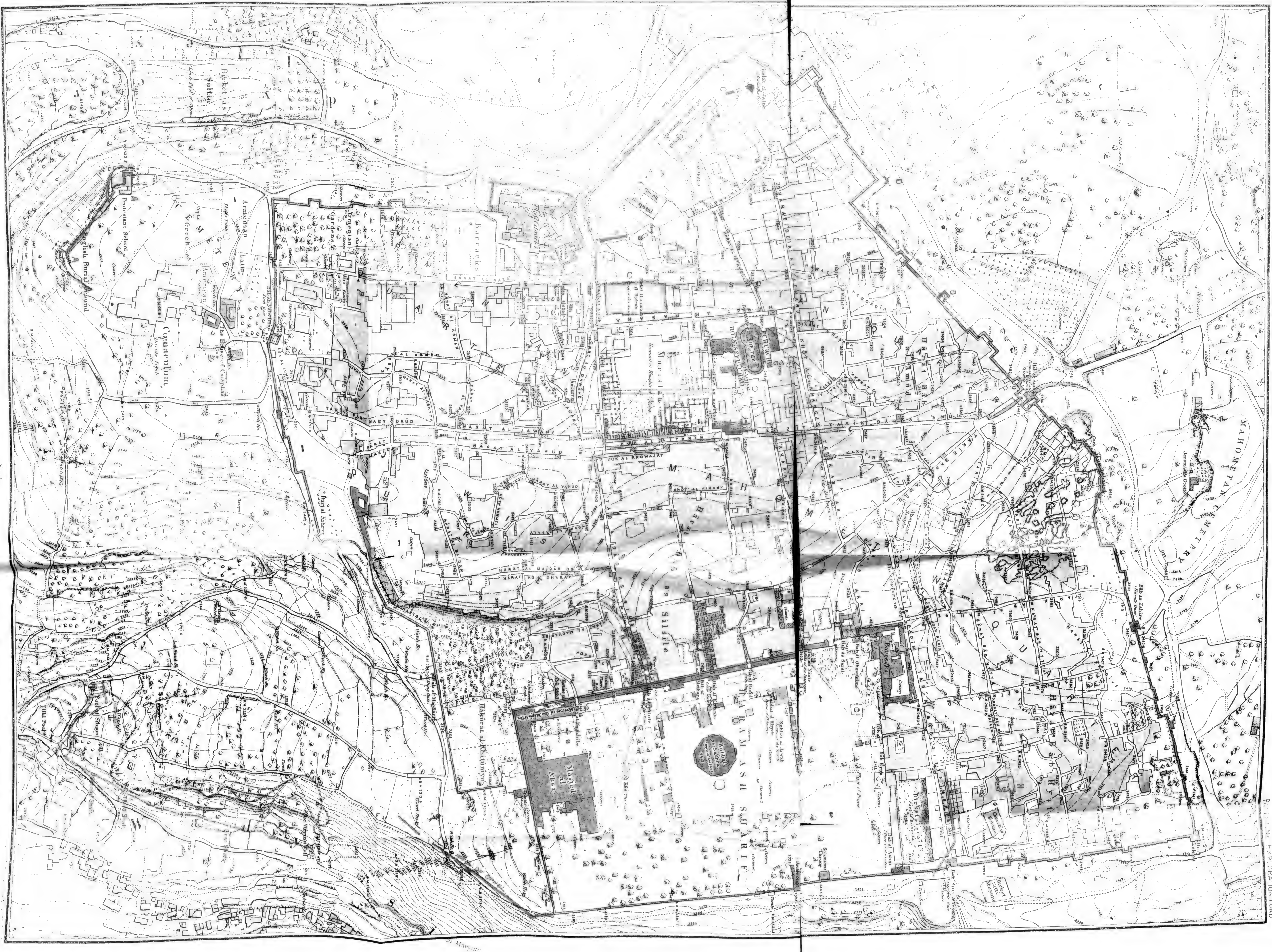
<sup>1</sup> Sir Charles Wilson suggests that possibly the Dome of the Rock was originally the church of St. Sophia, which was erected by Eudisia in the fifth century. Three documents in the sixth century mention this church, and no document before, or after, alludes to it. Sir Charles thinks that Abd-el-Melik either rebuilt this church or repaired it, making additions at the same time.

151.





Reduced by permission from the Ordnance Plan 2500 site made  
by Col Sir Charles W Wilson KCB, KCMG, DCL, FRS, RE  
to illustrate recent discoveries







E. Ancient paved court near the Church of the Holy Sepulchre. *Quarterly Statement*, 1888, pp. 19, 60.

F. Cave to the east of Church of the Holy Sepulchre. *Quarterly Statement*, 1889, p. 67.

G. Rock-cut tomb north of the Church of the Holy Sepulchre. *Quarterly Statement*, 1887, p. 154.

H. Pool of Bethesda. *Quarterly Statement*, 1888, p. 115, and ruins of a church.

## RECENT DISCOVERIES IN JERUSALEM.

### I.

#### REMAINS OF OLD WALL OUTSIDE THE PRESENT NORTHERN WALL OF THE CITY.

(The Nos. indicate the parts from west to east.)

IN the work of reconstructing the carriage road along the outside of the northern wall of the City, as I reported in my last, some earth near the wall was removed for filling up the road in some places, bringing to light some old remains hitherto unknown (*see plan of Jerusalem*).

D 1. Is an old corner of comparatively large hewn stones; on the earth being removed from it, the corner of another wall more ancient is seen behind it.

2. Is a rock-scarp with a rough face of about 8 feet deep, but as the top of it is still covered up with earth the exact height could not be ascertained; between this scarp and the first mentioned corner there is an edge indicating the continuation of the scarp.

3. South of the last is a large stone, originally forming the angle of the scarp or wall.

4. Is a similar rough-faced scarp partly topped with masonry, its depth is unknown, but it appeared to be higher than 2.

5. Is a large hewn stone *in situ*, in the same line as 3 and 4, and 13 feet from the face of the present wall.

6. The ruins of a tower.

D 7. The ruins of a chamber measuring, inside, 40 feet long by 19 feet wide, with walls of small masonry 3 feet thick. The eastern wall is partially destroyed; the northern has an opening in the middle 3 feet wide, originally a window (?), as the door would probably be in the east wall, as I suggest from the fact that opposite, in the western wall, there is a recess forming a bench or seat 10 feet long. The walls are only to be seen from the top. To decide the position of the door and what the chamber has been, the earth would have to be cleared out of the ruin.

8. Are some remains in line with the corner of the present wall, and looks much older.

9. Is certainly more ancient than 10.

11. The stones in this corner are not jointed.

Looking at these remains on the plan, it is quite evident the wall anterior to the present one lay further out.

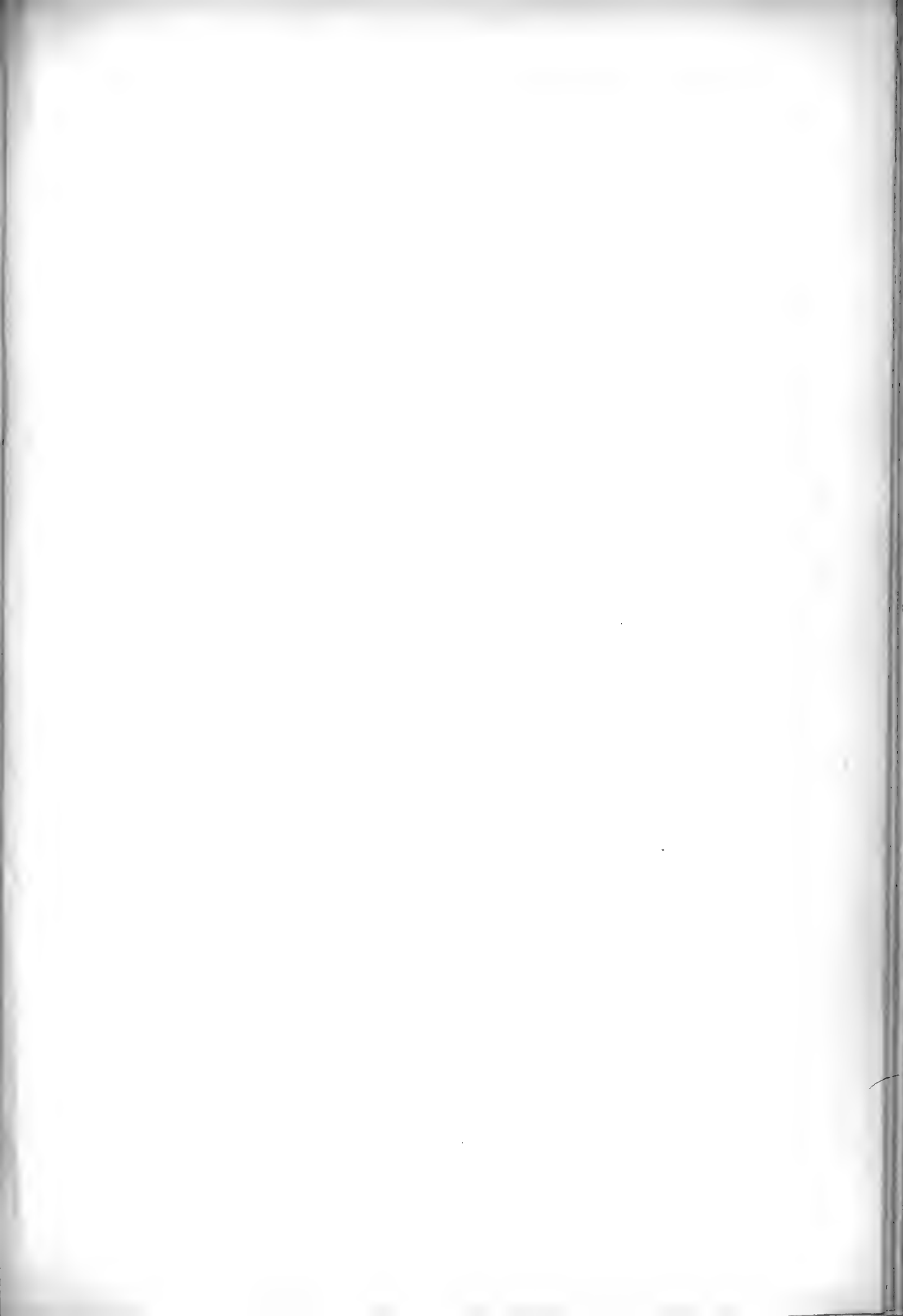
Medjer ed Din (129) speaks of the "Bab el-Amud," or Damascus Gate, as the *second* gate in this northern wall from west to east, hence a door existed between the Damascus Gate and the north-western corner of the city. And Gumpersberg (444) speaks of a block stone situated in this gate (the Lazarus or Lepers' Gate) so highly polished "that when anyone looks to it, another one standing behind him at some distance, sees him as he would be to the side before him;" through this gate the pilgrims entered. In the time of the Christian kingdom, 1099-1187, there existed, on the north wall west of the Damascus Gate, the gate of Lazarus, also sometimes called Lepers' Gate, for outside of it there was a home for lepers (*see* Tobler I, p. 172).

Subsequently, when the Moslems had conquered the city, they forbade the pilgrims to go in by the regular northern gate (Bab el-Amûd), in order that they should not see the fortifications, but were allowed to enter by the Lazarus Gate, a more shut up way and through the buildings of the Patriarchs, in order that they should see nothing of the city; and thence to the Church of the Sepulchre by a private gate, not through the regular entry in that holy building. It seems that this Lepers' or Lazarus Gate was of an inferior kind, and no traces of it in the wall are now to be seen; at a later restoration of the wall it was either walled up, or is under the surface of the ground.

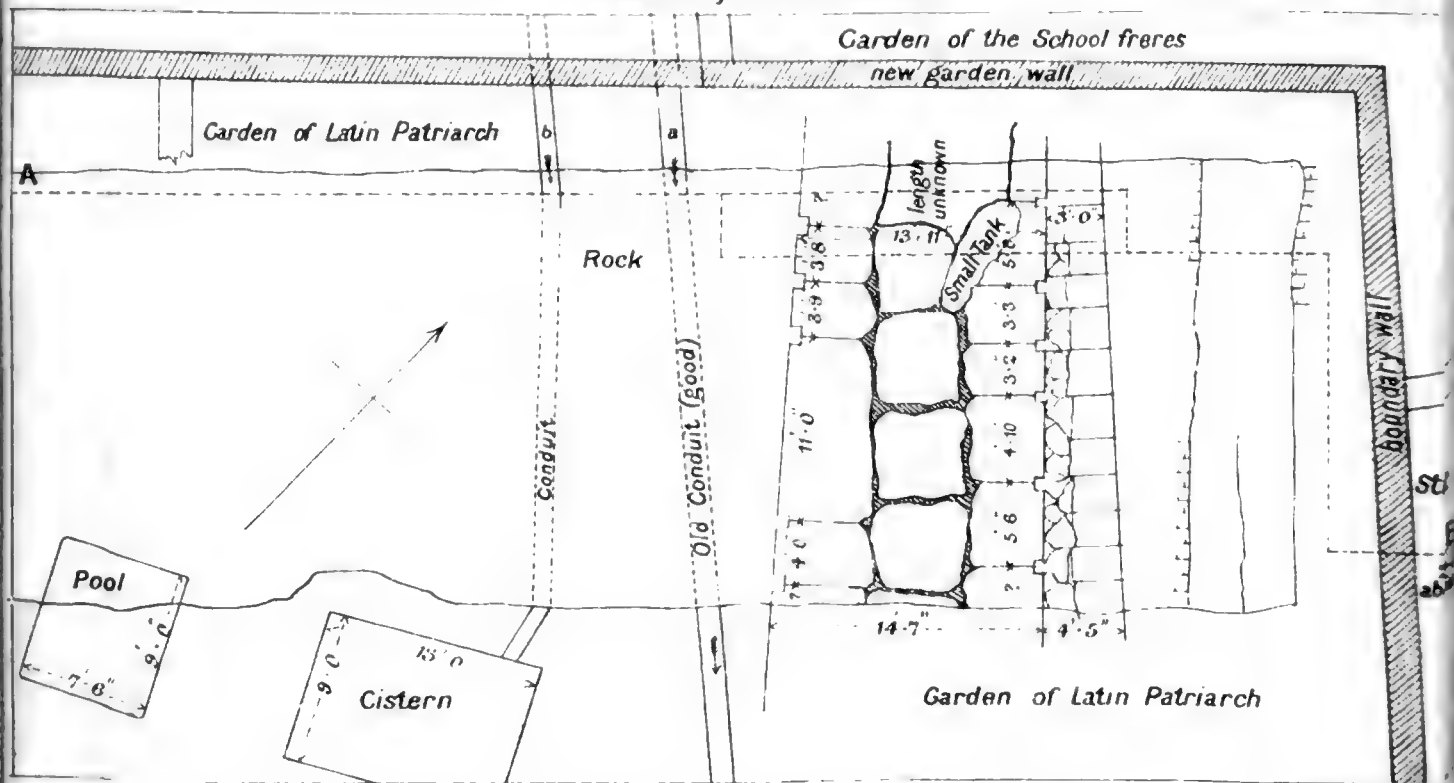
According to Tobler Deutsblätter, p. 414, the Empress Eudoxia built, in the fifth century, a house in which 400 lepers were lodged, and when the Crusaders got possession of Jerusalem (about 1100) they arranged also a hospital for the lepers, which lay outside the town at the Lazarus Gate, between the Damascus and the Jaffa Gate. The house was called the "Maladrerie," in which these poor sick, full of pain and misery, were kept as in a prison, and from everywhere came such poor people to this house. We see from all this that there was once a gate between the Jaffa and Damascus Gate, and one would think that it was somewhere in the neighbourhood of the north-western corner of the town. But according to Medjer ed Din, more likely between that and the Damascus Gate. I fancy that it is very likely to be found at 6, there having been a projecting tower, and in it a gate, forming an angle like all the other city gates of Jerusalem, and connected with a street leading direct to the convents (now in Latin and Greek possession) of the Christians, and so on to the Church of the Holy Sepulchre.

It is probable that this Lepers' Gate was situated even more east, and that the ruins of a former building (No. 7) formed its wash-house, or some building of that kind, and from here pilgrims could have gone on to the church in a nearly straight way, and the same distance.

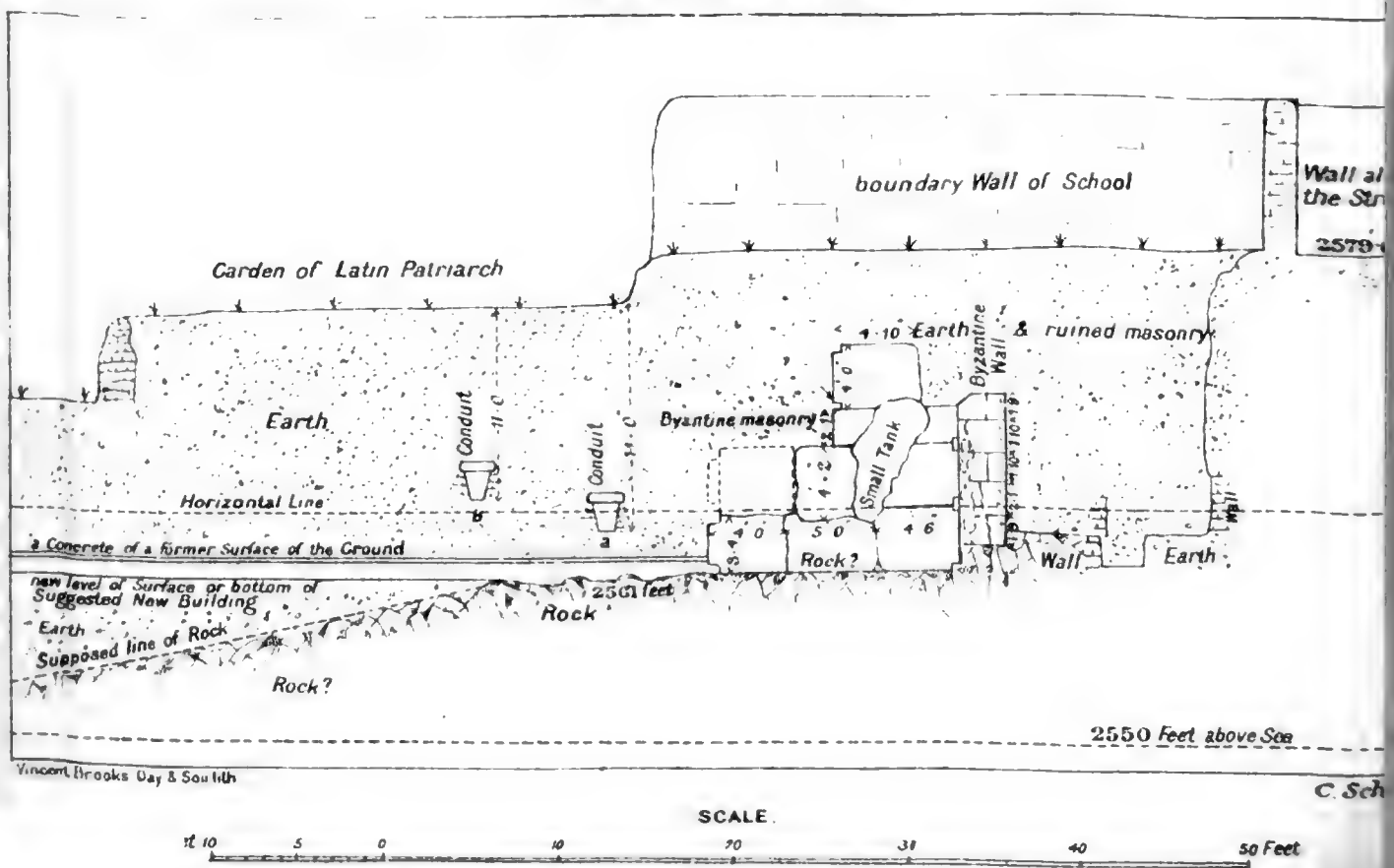
In order to settle these questions, it wants digging close to the wall down unto the rock, at the said points. When looking at the Ordnance Survey Map,  $\frac{1}{25000}$  scale, one sees there (at 7) a mound of earth which is now removed, exposing the ruins of a former building.



Recently discovered.



SECTION A. B.





## II.

REMAINS OF OLD WALL NEAR THE NORTH-EAST CORNER OF  
THE CITY.

In removing the earth off a space of ground 100 feet long by 100 feet wide and 16 feet deep, in the garden of the Latin Patriarch of Jerusalem, preparatory to enlarging the palace and making other improvements, the workmen found a portion of an old wall (*see* plan of Jerusalem, C), very probably a remnant of the ancient city wall. I had full liberty to examine and measure everything minutely (*see* plan of old wall and section).

The remains are of a wall, on an average 14 feet thick, of large Jewish stones, and laid bare for a length of 26 feet. The stones are, on an average, 4 feet high, like those at the "Haram" wall, and have also the same draft. The stones on both sides of the wall are drafted. On the western—once the outer face—I counted (besides those which are at both ends, and of which I could not take their measurements) four stones, one 4 feet long, the next 11 feet, and the two others 3 feet 9 inches and 3 feet 8 inches, and above 4 feet wide, and nearly the same height. On the east side I counted five stones of the same description, one 5 feet 6 inches, the next 4 feet 10 inches, then two nearly equal, 3 feet 2 inches and 3 feet 3 inches, and the next 5 feet, also nearly 4 feet broad and high.

Between these two rows of stones there are four larger filling stones, not properly cut, simply dressed roughly to a square form, of the same height as the others; they are, on an average, nearly 5 feet broad and 5 feet 6 inches long. Over this layer was a second one, but not so complete; on the western side of the wall several stones were missing, but their size could still be ascertained. They were higher than the first, *viz.*, 4 feet 6 inches—in breadth and more, but the filling stones narrower (*see* section) towards the northern end; a small pool or cistern had been made by widening the joints (which were comparatively wide in the middle of the wall and without any mortar), as shown in the drawings.

On the top of the two courses at the northern end is a very smooth stone of the Byzantine period, measuring 2 feet 1 inch in height, over this is placed a drafted stone both off which pieces were broken to form the cistern or tank.

The overseer of the work told me that they found a similar stone, near to the last-mentioned one, but lying on the earth.

The faces of these large stones are not smooth hewn, but in some degree rough. The bearing of this old wall is  $41^{\circ}$  N.W. It is curious that the thickness is not all alike—in north something narrower than in south. But what is more curious is an attached wall of quite a different kind, of very smooth hewn stone, on an average of about 2 feet high and a little more long. I counted five layers; between these and the old large stones is a filling with rubble and black mortar. But the top stone has a slanting bevel towards the old wall (*see* section). There is

even more difference in the thickness of this wall than in the old one—at the north end it is 3 feet thick ; at the south end, 4 feet 5 inches. The reason of this cannot yet be explained or understood. It looks exceedingly strange that to a wall of very large stones and 14 feet thick, another wall of smaller stones was put alongside of it, and leaving thus, as the slanting bevel proves, the old wall without. How far northwards this old wall extends I cannot tell, nor is there any hope of finding out now, as the excavations will not be carried on northwards, but probably southwards. Whatever will be found there I will report upon in due time. They think a corner of the old wall will be found. These old remains are certainly in connection with those Dr. Robinson first reported upon (and spoken of in Sir C. Wilson's Notes, page 73), which were broken in pieces, and removed when the school brethren erected their large building—those running exactly due north, and, as it was found out afterwards, forming a right angle. The distance between the two is about 65 feet only. For the situation of the newly discovered wall, *see* plan of Jerusalem (C).

These old remains have been removed, and the large blocks broken up for building stones.

It is remarkable that west of these old remains, for a distance of 64 feet, no old masonry was found, simply earth, and into it built comparatively modern tanks, &c. East of it and everywhere are hewn stones or walls of former buildings, and it would seem that the rock was then partly removed, as on the west side the rock is in its old condition, and following down in a decline 12 or 13 feet in 100 (*see* section).

West of the old wall, 6 feet 8 inches distant, a water conduit was found, the continuation of which was also found by the school brethren west of their new building inside the city, near the northern present town wall, and was also found at several places outside ; most probably it once brought the water from the north-western high ridge into the town and into the pool formed, when the Latin Patriarch built his palace about twenty-five years ago, which was about 50 feet long and 30 feet wide, and about 20 deep. Close to it is another one, but of smaller dimensions, as I am told, for I have not seen it. This conduit is well built—measuring on the bottom 1 foot 2 inches wide, on the top 1 foot 5 inches, and 2 feet high, and covered with flagging stones. Six feet distant from it westwards another one was found, but of lesser importance and inferior work, situated a few feet higher. Its bottom is 11 feet under the surface of the garden, whereas the former is 14 feet. It is recognisable by a hard concrete, lying horizontal over the whole place, as far as it is excavated, towards the west and south. This concrete stops at the old wall on the rock (*see* section), 2,561 feet above the sea.

There were also found two cisterns, one 9 feet long by  $7\frac{1}{2}$  wide, and without a roof, the other larger, 9 feet wide by 13 feet long, still in good preservation but full of earth, into which the conduit *b* brought the water. Both cisterns are of no interest, were built simply in the *débris*, and will now be destroyed.

## III.

NOTES ON THE PLANS AND THE CAVE EAST OF THE CHURCH OF  
THE HOLY SEPULCHRE.

I reported previously that I wished some excavations should be made on the Russian property, east of the Church of the Holy Sepulchre (*see* plan of Jerusalem); this was not done at the time, when the work of the "Cisterns," a new building, was going on. However, in the beginning of May (1888), there came an order from St. Petersburg to the leaders of this work, that they should make the excavations where I desired. So I pointed out three places desirable where they should excavate. The first was to make a shaft at "B" (*see* plan), and dig down till they found the rock, which was done; but as I left Jerusalem on the last of May, for a journey to Europe, I gave full instructions to one of my men to always note everything that was found, and take all necessary measurements. A few days after I had left they struck the rock, a piece of which was broken off to show it to me. It proved to be the usual Jerusalem "Meleki" rock. The shaft went down through earth and *débris*, and near the rock a sediment of fine earth was found. The rock was found to be 47 feet 6 inches below the surface of the present street, or at a height of 2,326 feet above the sea. My orders were: that when the rock was found, the shaft should be filled up to about the half height, and then strike a gallery eastward. They did so, but 6 feet higher than the middle, and a little below the rock appearing there; the rock is a ledge of about 4 feet thick (*see* Nos. 12 and 11). Under it there was a wall 9 feet 10 inches thick, which they had to break through; it consisted of rough boulders, large and small, without any proper facing, and without a solid foundation, resting simply on *débris*, the piece of wall above the rock had hewn stones, and on the west side of the shaft at B B there were five nicely dressed stones, but only six layers resting on *débris*.

I told the overseers of the Russians, and the architect, that when they went eastward they would find some "cavity," which they did, but full of earth; however, they cleared a gallery for 12 feet eastward, having the rock as a roofing, slanting downwards towards the east, exactly as the roofing in the Cotton Grotto east of the Damascus Gate, opposite Jeremiah's Grotto. For about 12 feet further east, an iron rod could be put between the rock roofing and the earth; fearing that going on further with the work would involve too much expense, they left the clearings, and so the work stands. So I thought it best to report on it now. As the rock is known on four places (*see* the drawings), and everything looks like the large cave or Cotton Grotto already mentioned, one comes to the conclusion that this was also a large cave. In the street above, the rock is very near the surface, in some parts cropping out. I have shown in dotted lines the supposed extent of the cave towards the east. There may be, possibly, a door or outlet in its eastern end. Sufficient excavation has not been made to indicate the size of the cave, but it appears to extend more in the north and south than in the east and west.

I suggested another point (K) for digging a shaft to find out the edge of the rock, and how far the cave extended in that direction.

The third point for excavation would be at C C in No. 11, and find out the continuation of the blocked-up conduit Cx, in No. 11 and No. 12, which I suppose is hewn through the rock. In No. 12 section I have shown in dotted lines what I presume to be the form of the cave in the eastern and western parts. When excavations are resumed at points K and C, &c., I will continue this report.<sup>1</sup>

CONRAD SCHICK.

## RECENT DISCOVERIES IN GALILEE.

*Nazareth.—Discovery of Large Cave.*—At Nazareth, very few ancient remains are found, excepting the "sanctuaries" shown in the convents and in the vicinity of Nazareth, the explorer has few other proofs but those guided by faith and tradition, which are not always reliable; it is, therefore, welcomed if a discovery as the following is made.

In the convent yard of the "Sœurs de S. Joseph," at Nazareth, a cistern was to be dug, and in the course of the work an ancient cave was discovered, choked up with rubbish and mud which had to be removed at great expense, until the character of the subterranean room was seen. Signs of a well, the dampness of the interior, and the soft humid rocks, from which, even in summer, water was dropping, seemed to suggest the vicinity of a spring, which, according to local tradition, once flowed on the north of the "*beidar*," or threshing-floor of the city, which lies a couple of hundred yards south of the convent and the cave mentioned, and is said to have been in connection with *'Ain Miriam*, the spring on the north of the city which supplies Nazareth with drinking water. The discovery of a fresh spring would be a matter of great importance at Nazareth, as it suffers from the want of water very much during the two hot months of summer. I was, therefore, asked by some priests and the abbess of the convent to examine the interior of the cave, and find out whether any spring was probable or not. I found the mud and rubbish only partly removed, while signs of large rooms adjoining were visible, and consequently recommended the continuation of the excavations. This advice was followed, and in October last I again examined the place, planned the caves, and now give the following account of it (see plan and sections):—

From the paved convent yard we step down the new-masoned stairs into the actual staircase, the floor of which we reach at a depth of about 20 feet below the surface. The staircase is vaulted, measuring 11 feet each side. The cross vault is carefully built with large soft limestones

<sup>1</sup> When the cave has been thoroughly explored the plans and sections will be published, at present they are in an incomplete state.

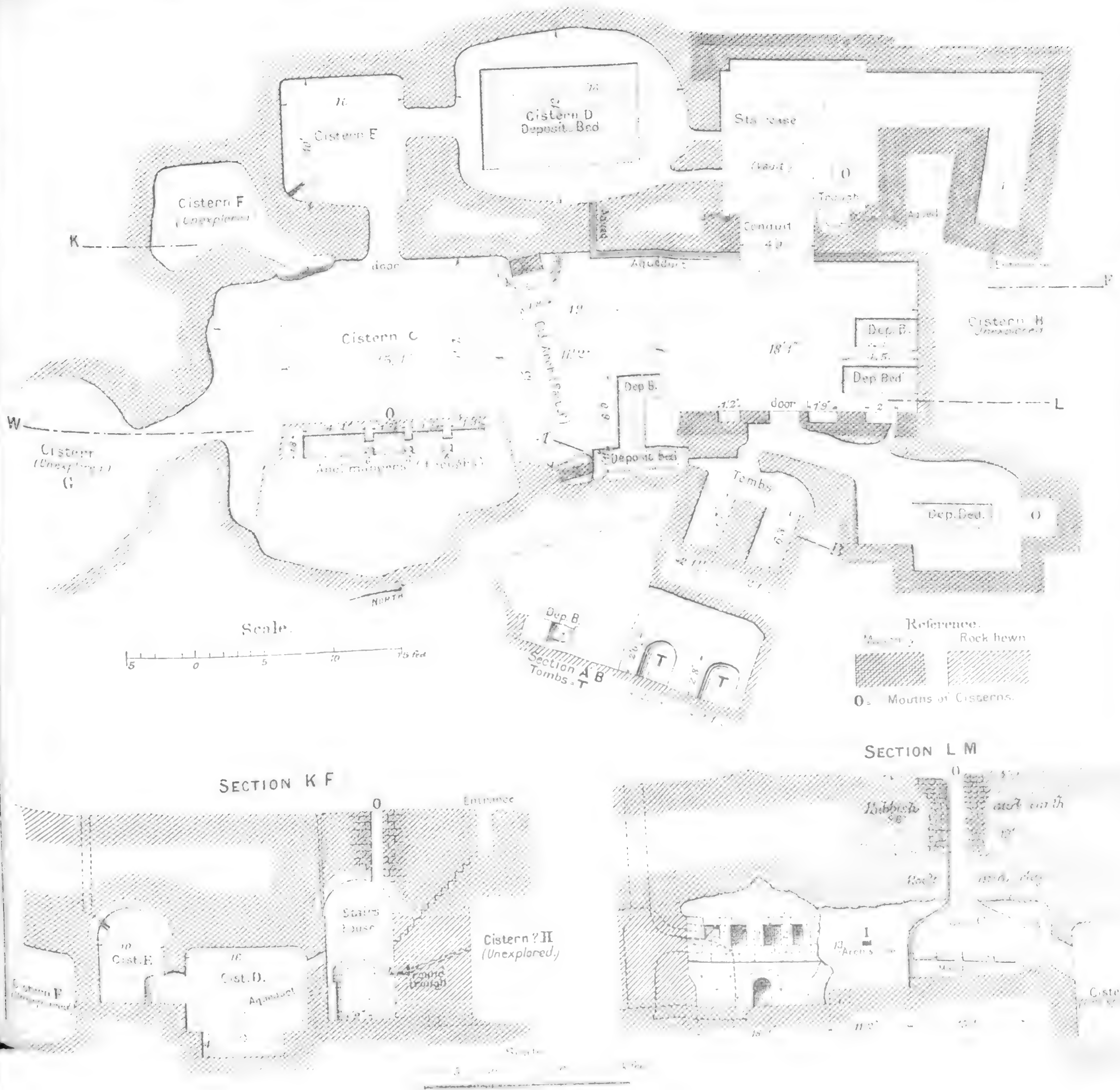
K



W

Cistern  
(Unexplored)  
G









(*Nāri*), and well preserved ; the top of the vault shows conical fittings ;

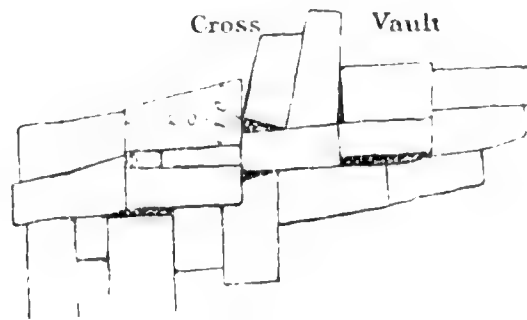


FIG. 1.

the joints are wide, and although once filled with mortar, are now open ; at the side of the last six steps is a masoned pit (O plan) about 2 feet 6 inches wide, leading from the surface through the vault ; at the end of the stairs near the floor a circular trough is placed on a bench of the bare rock, into which a small aqueduct (*see* plan and section) is led. Thus arrived on the floor we find that the room described is cut out of a soft white limestone rock, which was masoned on every side except the northern, near Cistern D. We step further through a sort of door, the upper part of which, 4 feet 9 inches wide, is cut out of the rock in a round shape, and two steps down arrive at the main room of the subterranean cave, the floor of which is about 30 feet below the surface. This room is rectangular, from 10 to 13 feet high, hewn out of the same soft rock, and is divided into three parts by terraces, the southern of which lies lowest, and the northern highest ; in the northern (cistern C of plan) we find on the western wall four rock-cut troughs, at a height of 3 feet 5 inches above the floor, the largest and deepest of which is 4 feet 4 inches long, 1 foot 8 inches wide, and 1 foot deep, or little more, all connected by small channels, to lead the water from the upper small one down to the lowest, the bottom of each being lower than its upper neighbour ; their width, 1 foot 8 inches, is the same. I consider these to be either water-troughs or mangers, as they are similar to those so frequently found in the Haurān subterranean stables and rooms ; *Mdme.* the Abbess believes they were troughs used by the ancient Jews for "purifications." Just above them (O plan and section) is a round mouth, 3 feet in diameter, used to draw water from the cistern, the upper part of which, while running through rubbish and earth for 9 feet 6 inches height, is masoned up with hewn stones, while the lower part through rock and clay is bare ; arriving at a depth of 19 feet, this pit opens in the form of a funnel to a cistern (C, section L M) irregular in shape ; the floor of cistern C is 15 feet 1 inch long, and 11 feet 7 inches wide ; from here we go down one step, about a foot high, to the central part, which in its eastern wall shows the first three stones of an arch of an original width of 15 feet, and in the opposite western rock wall one stone (I of map) belonging to the same arch probably ; in the floor of this apartment we see three connected rock-cut basins, the principal one of which is a little over 6 feet 3 inches



long, and 1 foot 11 inches wide, and about 2 feet deep. I hold that these basins, in the way they are placed and connected (*see* plan), are deposit beds (*i.e.*, for beds into which the mud deposits settle, as often seen in this country, but the opinion that they were graves could hardly be admitted. These basins are connected with the southern part above mentioned, into which the stairs lead from the exterior. In this room, also, which is separated from the central one by a terrace 9 inches high, we find near the southern wall on the floor two separate basins, the largest of which is 4 feet 5 inches long, 2 feet wide and deep: the fact that they also lie, as the above in the lowest part of the floor, and that they are connected with an unopened apartment (cistern (?) H of plan) convinces me that they were also deposit beds of the cisterns. The walls of these cisterns or rooms described are bare, but there are signs of an original plastering in different parts, and among the rubbish and mud drawn to daylight, piles of a good thick mortar-cover are found, as well as pottery ware; only the western wall of this southern apartment shows a piece of masoned wall built on the soft clay rock (*see* section LM of plan), evidently a partition wall with three rectangular niches, and a fourth opening which is connected with an adjoining room to the west. This masonry must be of the same period as the vault described; the stones are also *Nâri*, large and not very carefully worked and fitted. Below this wall is an opening, a door cut through the soft rock, through which we enter by a narrow passage into a room of irregular shape, with a basin or deposit bed in the centre, above which a mouth (O of plan) opens towards the surface. This mouth, as well as the walls of the room, were built up by the convent while excavating, the rock then being in a dangerous, crumbling condition. We return a few steps back through the narrow passage, then turn left hand and crawl through a low door into a low room of irregular shape, which contains the most important remains of this cave, namely, two tombs, or Kokim, of nearly same size. The bearing of these Kokim is  $54^{\circ}$  N.W.; the southern one is on one side 6 feet 3 inches long, 2 feet 1 inch wide, and 2 feet 8 inches high (*see* section AB on plan), the other, merely separated by a rock partition wall, may have had the same length, but is now only 4 feet 7 inches long on one side, 2 feet wide, and 2 feet  $6\frac{1}{2}$  inches high; both have rounded ceilings, and are rock-hewn, the rock here being more compact. I consider these tombs, to which a *stone door* of *Nâri* was found lying near, of common form, 3 feet 6 inches long, 2 feet 5 inches wide, and 7 inches thick, to be the few original remains of this cave; unfortunately we found no ornament or sign whatever, either on the Kokim nor on the stone door. The bearing of the central large room of the cave is  $11^{\circ}$  N.E.

In the east of the cave (cistern C) is an irregular door, through which we find a cistern (E of plan) of rectangular shape, 10 by 10 feet, rock-hewn, the upper part of which is covered by a round vault somehow different from the cross vault of the staircase, showing a projecting stone (Fig. 2) in the western part with the object of leading rain-water from the surface into the cistern. From here we proceed through

an opening to a large adjoining cistern (D of plan); this cistern measures 16 by 12 feet, is of an oval shape, and has a central deposit bed (see section KF of plan); it is connected with the staircase by two openings near its ceiling, and from the unexplored cistern, H, a small aqueduct leads to it, which is interrupted by the door leading to the stairs of entrance (see plan). This small aqueduct evidently was built before the staircase was used as such, and had the object to supply cistern D with the surplus of cistern H. The aqueduct is composed of large channeled stones placed on the clay rock, and measures 4 by 6 inches in width. To the north of cistern E another cistern (F of plan) was discovered, but not cleared out yet, also to the north of cistern C a narrow sloping passage leads to a wide room (unexplored cistern G of plan), which yet awaits clearing.

In the yard itself, above the cave described, but evidently in no direct connection with it, the "Sœurs" found three pillars free of common masonry; they are composed of large *Nâri* stone, and to judge from their form and shape, seem to have formed arches; they are situate above the ancient arch of the central room (11 feet 9 inches south of mouth O of cistern C lies the first pillar). The excavations must be continued on the surface, before satisfactory results are obtained.

Among the *débris* found in the cave was a handsome little marble column 3 feet 3 inches long, 5 inches in diameter (Fig. 3), with no base

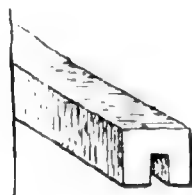


FIG. 2.

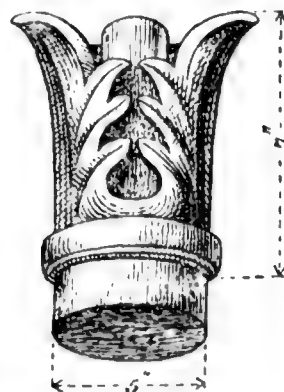


FIG. 3.

but a capital worked to it 7 inches high, which, although defaced, shows careful carved work; another marble column 8 inches in diameter, a pedestal cornice of 'Ajlûn marble, having the following shape (Fig. 4):

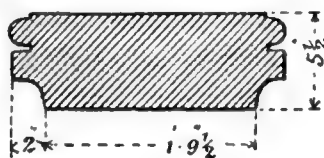


FIG. 4.

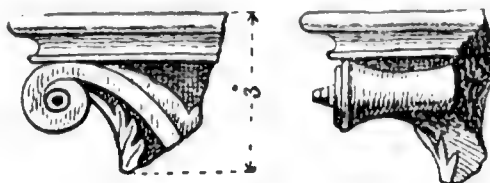


FIG. 5.

Large granite columns were also excavated in lengths of 4 and 5 feet, and an upper diameter of 1 foot 7 inches. A fragment of a beautiful little Ionic capital found shows parts plated with goldleaf (Fig. 5);

also a small statuette  $2\frac{1}{2}$  inches high (Fig. 6), of which unfortunately the head and legs are broken, made of a soft limestone, was once plated with gold. This most pretty little work, although much defaced by the damp, shows a rich folded and ornamented dress, the arms holding something like a bunch of flowers, besides a mass of glass lachrimatories, generally broken to pieces; the "Sœurs" gathered heaps of mosaic glass, the pieces varying about an eighth of an inch square, representing every possible colour, and some being nicely gold-plated: also large pieces of dark glass up to  $\frac{3}{16}$  of an inch thick, many glass beads (pearls) of different colour and size, and any amount of fragments of pottery ware from jars, pots and plates, some painted with simple black stripes, others red and brown, and a nice collection of well preserved lamps of pottery ware (see Fig. 7). None of these lamps

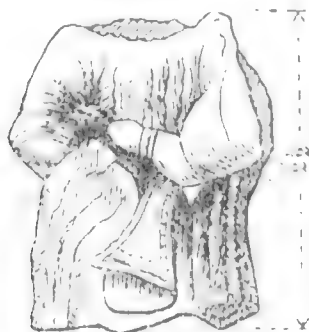


FIG. 6.

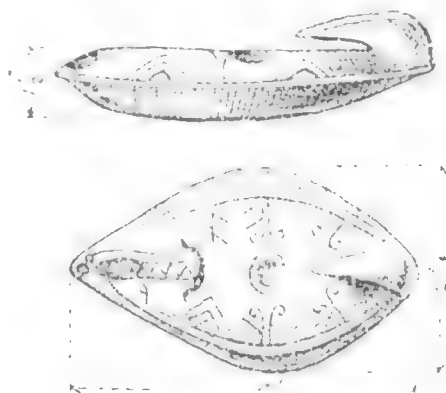


FIG. 7.

showed any inscription—or letters, merely antique ornamentations, as seen from the annexed sketches. I also found among the remains an instrument made of bone, of the following shape and ornamentation, probably used for weaving (Fig. 8):—



FIG. 8.

Among the coins found I recognised some Arabian, which bore the inscription, الله هو العزيز and الامام المنصور. Some other Roman coins of common appearance; of still greater interest were some Jewish coins, or at least some pieces having old Hebrew characters, much defaced, but worth a special study.

The ground and ruins where the above-described cave is located is called the *Jâma' Abd es-Samad* by the natives. The Nazarenians, as well as the "Sœurs," stated to me that a mosque stood there at a late period. Old men pretended to know that, according to tradition, the *Jâma'* was

built on and rebuilt out of the stones of an ancient church which stood on the same place.

This is what I gathered on the spot.

The caves were visited during last summer by competent historians ; among others, by M. V. Guérin himself, whom I had not the pleasure of speaking to, but who, according to what was stated to me by Mdme. is of the opinion that this cave represents the edifice mentioned by l'Abesse Arculphus, of the seventh century (according to Adamnanus<sup>1</sup>), and the description of which Guérin quotes in his work, "Description de la Palestine," Paris, 1880, Galilee, vol. i, p. 99, as follows :—

"Civitas Nazareth, ut Arculfus, qui in ea hospitatus est, narrat, et ipsa ut Capharnaum murorum ambitum non habet, supra montem posita ; grandia tamen lapidea habet ædificia, ibidemque duæ prægrandes habentur constructæ ecclesiæ, una in medio civitatis loco super duos fundata caneros, ubi quondam illa fuerat ædificata domus, in qua noster nutritus est Salvator. Hæc itaque eadem ecclesia duabus, ut superius dictum est, tumulis et interpositis arcibus suffulta habet inferius inter eosdem tumulos lucidissimum fontem conlocatum, quem totus civium frequentat populus, de illo exhauriens aquam, et de latice eodem sursum in ecclesiam superædificatum aqua in vasculis per trochleas subigitur. Altera vero ecclesia in ea fabricata habetur loco ubi illa fuerat domus constructa, in qua Gabriel archangelus ad beatam Mariam ingressus ibidem eadem hora solam est locutus."

Comparing the above description of the church standing on the place of tradition, where Jesus passed His early youth, with my account given, we find that there may be a possibility of identity if we admit that a second arch, besides the one of which remains still are found, has existed, on which the church was built, and if the expression "tumulos" can be identified with the two rock-cut tombs or Kokim above described, — a comparison which is not adopted by all explorers of the place. However this may be, there is this much to state that the subterranean cave before us had at least two periods of use ; the first and ancient period is represented by the two Kokim, which, considering the coins found, may have an ancient Jewish origin, and the cave represented a subterranean burial-place, like many others found throughout Palestine ; a second period may have changed and widened the sepulchral cave into a large cistern, or group of cisterns, with a large central room, to which the women descended by the stairs shown, to fill the jars as they now do at the present day ; the cisterns lying aside of this room were kept as reservoirs for time of want. This period, with the masonry work remaining, excepting the arch (1), may have had its beginning in the middle ages.

To have an idea of the plan represented by the four pillars found above the cave, excavation work must be done westwards, that is, on the place where the Jâma' Abd es-Samad actually stood ; here, doubtless, interesting results would be obtained, and it is very desirable that the

<sup>1</sup> Adamnanus, "De Locis Sanctis," cxi, § 26.

Sœurs de S. Joseph at Nazareth should continue the excavation work at this interesting locality.

*Jâ'uni.*—At the Jewish colony Rushpina, near Jâ'uni, at one hour's ride eastward from Safed, I lately came across an old ruined Jâma', also known by the name "*Beit el 'Arab*," بيت العرب "the house of the Bedawin," which, from its plan, must have been something like an ancient bath (Fig. 9).

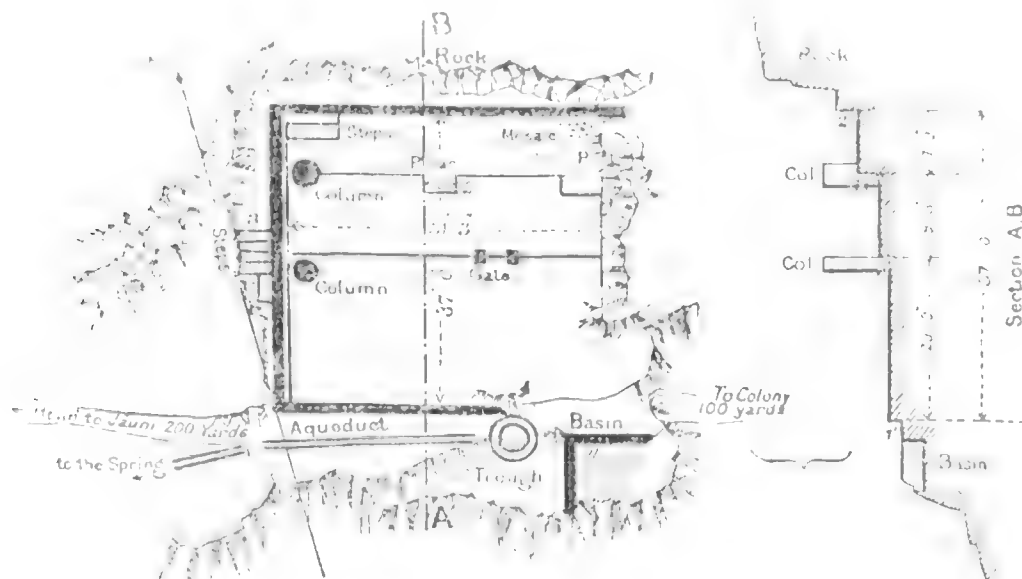


FIG. 9.

Coming from the colony we enter a flat, rectangular space, evidently hewn out of the solid rock, measuring 37 by 31 feet, with steps in terraces, the first of which is 1 foot high and 20 feet broad, the second 9 feet 3 inches wide and 1 foot high, the third 15 inches high and 7 feet 9 inches broad. This latter terrace has three pillars, on one of which a column still stands (Fig. 10); the floor was paved with mosaic, regular

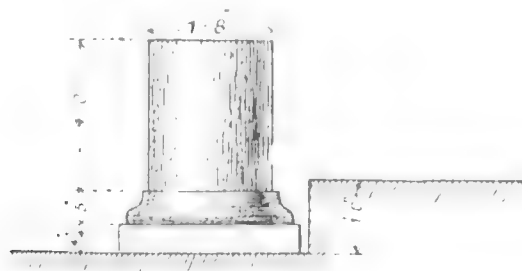


FIG. 10.



FIG. 11.

square pieces of hard limestone placed in good mortar, together  $\frac{1}{2}$  inch thick. The mosaic stones had different colours—black, white, and grey. Behind this third terrace there is a wall, formed by the bare limestone rock, about 5 feet high, which also continues round the western side. From the north and west, where the rock overhangs the ruin, rock-hewn steps lead to the interior. On the second terrace a column still stands, 1 foot 8 inches in diameter, and 5 feet in height, with base, and remains of a gate or door are visible.

At the lowest point and southern end of the building we find a large stone trough 4 feet in diameter, and near by it a small ruined aqueduct leading in a south-western direction to the spring of the village; on the other side of the trough there are ruins of a cistern. The road from the village to the colony leads along its southern side.

As before said, the ruin with the aqueduct, as well as the plan of the interior, speaks in favour of a bath; in this case, the lowest terrace must have been the bathing basin, the second one the room for clothing, and the third one, with mosaic, the room for rest, with a door to the exterior in the north-west corner.

Nearer and towards the colony Rushpina I came across an old cemetery; among the scattered stones once forming the graves lie parts of a huge column of hard limestone, measuring 3 feet 2 inches in diameter. The different parts were fastened together by pins, same as seen at *Tabakât Fahal* ("Pella," p. 26) (Fig. 11); the pin-holes had the form of a cross, 1 foot long, 1 foot 2 inches broad, and 3 inches deep; another pin-hole was circular and 4 inches deep. The ground being flattened, although lying on a slope, and having a commanding position over the plain down to the Lake of Merom (*Hâlêh*) and vicinity, the columns may have belonged to a temple. The Jewish colony, founded by the generous Baron Ed. de Rothschild with the name of Rushpina, is flourishing. Gardens, vineyards, and about thirty-five buildings, partly with gable roofs, decorate the rocky slopes around *Jâ'ani*.

*Esh-Shejara*.—While laying out roads I came across a flat rock (Fig. 12), situate on a slope of the vicinity of the village *Esh-Shejara* (between *Lâbieh* and *Tabor*, on the road from *Kefr Kenna* to *Tiberias*), which has the following shape:—

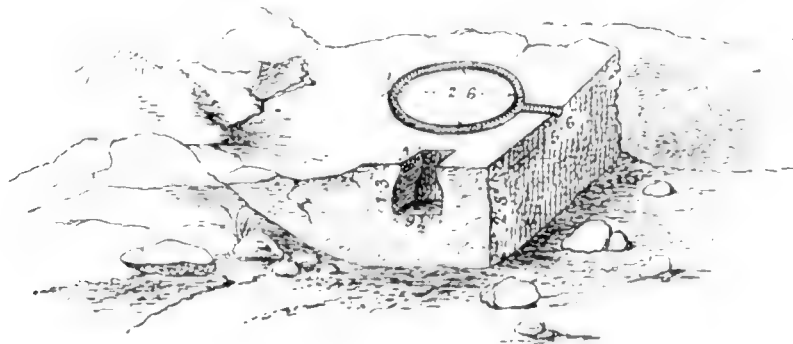


FIG. 12.

It measured about 5 feet 6 inches square, with a height of 2 feet 8 inches, but was evidently higher originally, the fellahîn excavating around the rock, seeking for a *Kenz* (treasure), and thus laid it bare, but covered a part of it up again. The flat surface of the rock has a circular ring 2 feet 6 inches in diameter, forming a groove only 1 inch wide, and about  $\frac{1}{2}$  inch deep, with a straight groove of about the same width, leading from the ring to the edge of the rock. On the western vertical side of the rock I found a notch, cup-formed, 9

inches wide below,  $6\frac{1}{2}$  inches on the top, 1 foot 3 inches high, and 7 inches deep (*see sketch*). The rock is hard limestone. The level surface was not worked, but seems natural; the sides were evidently shaped with a tool, although no mark or sign is discernible. An old fellah Sheikh, who accompanied me, named this rock *El-Mókadi* الموقدى (probably from *قَدَّ* "to slice into pieces"), which expression was repeated to me later by others. The people seem to have a hazy superstition as regards this rock, the history of which I hope to gather later. Was it an altar or a press? Further up the hill towards *Lâbieh*, and from here north-westwards down its slope, I found a number of unique coniform cuttings in the surface of the flat rocks, one to one foot and a half deep



FIG. 13.

and wide, and also less, some only a foot wide and half a foot deep; they are situate at considerable distances from any cistern or well, and spread all over the rocky slopes.

Between the villages *Esh-Shejara* and *Kefr Sabt*, near the *Sultâni* (high) road, leading from the *Sâk el Khân* to Tiberias (*see* Palestine Exploration Fund Map), I found a circle formed by huge, unhewn stones, with a diameter of 50 feet. The stones have a height from  $2\frac{1}{2}$  to  $3\frac{1}{2}$  feet. This ruin is called *Rujm el Harâik*, رُجْمُ الْحَرَايِق, "the mound of the burnings," and is doubtless of great age. The vicinity is called *Daher es-Salib*, ظَهْر الصليب, "the slope of the cross," as according to the fellahîn, a cross was chiselled on one of the large blocks mentioned, but which I could not discover.

Walking from the village *Esh-Shejara* towards *Khûbet Kaisharân* (*see* Palestine Exploration Fund Map), I found on the slopes passed, near this ruin, some caves, which were quite recently discovered and opened by shepherds. Their interior, which I explored, has a distinct sepulchral character, *i.e.*, rooms from 10 to 15 feet square, with Kokim and loculi worked into the vertical walls, some of which yet contain human bones, but the limestone rock is so soft and crumbling, the interior to such a degree fallen and full of dust and stones, that a plan could not be made. I can merely state that the plan would be very nearly the same as that of the grand cave at *Sheikh Abreik* (on the road from Haifa to Nazareth), smaller of course, but having a number of rooms connected by narrow low passages, only to be entered in a crawling position. Curious enough, the cave, or rather caves, for several were found which may have a connection with each other, have not an entrance from the front, as others, in the

face of the rock, but seem to have been reached by a passage (Fig. 14)

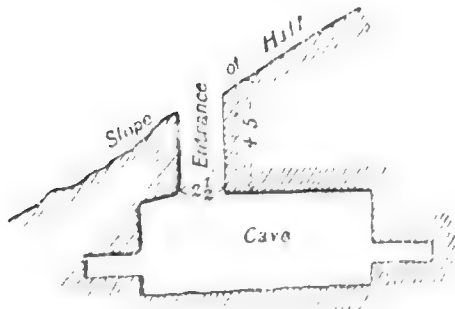


FIG. 14.

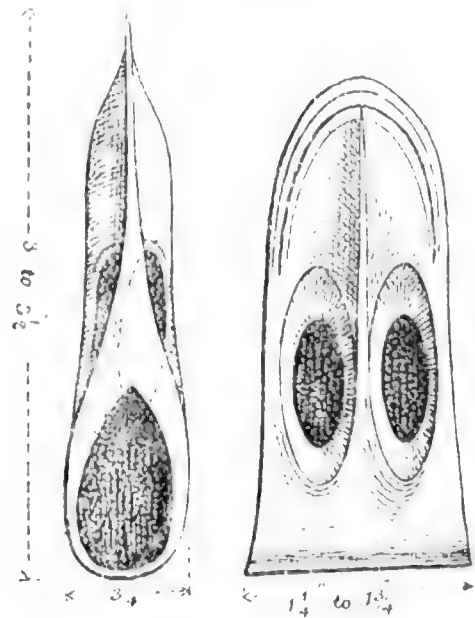


FIG. 15.

through the ceiling, about 2 to 2½ feet wide, as several were found leading into the same cave, but probably among the brushwood of the slopes the general entrance will yet be found.

While crawling about in the interior my companions found two similar copper instruments of the following shape (Fig. 15):—Each one is from 3 to 3½ inches long, 1¼ to 1¾ inches broad, and ¾ inch thick; its shape is that of a short spear or hatchet, with a rib on its broad (flat) side separating two oval holes which stand in connection with the ear of the instrument, to fasten its handle in. The flat end, the edge of the instrument, bears some parallel ornamental lines. Perhaps these instruments—for they could hardly be anything else—were given the dead into the grave as one of the favourite weapons. Also a thin bracelet of copper, ½ inch thick, much defaced, was found, having at its end something like a snake-head (Fig. 16).

Finally they brought me a copper coin, found among the dust in a grave, which I reproduce in its natural size and stamp (Fig. 17):—



FIG. 16.

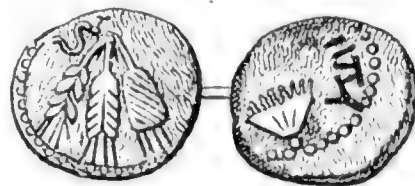


FIG. 17.

On one side there are three ears, tied together with a sling, surrounded by a ring of pearls; the other side shows a sort of purse with tassels and some letters, which I am unable to decipher.



Modern *Esh-Shejara* is only about fifty years old, but it is built on a ruined site with the name—according to information collected on the spot—of *Deir Hânîn* دِير حَانِين to which also the ruined mosque and church near the spring and village (see "Memoirs of the Fund," vol. I) belonged. According to tradition, *Deir Hânîn* was a very important market place, it being situate on the crossing of the two high roads—Damascus to Jerusalem, and 'Acca to Haurân. Both roads are still frequented, but the market was transferred to *Sâk el Khân*, a Karavan-serai of old style near the foot of Mount Tabor; even that market was done away with some years since, the people becoming more settled; their wants are supplied from the cities of Nazareth and Tiberias.

G. SCHUMACHER.

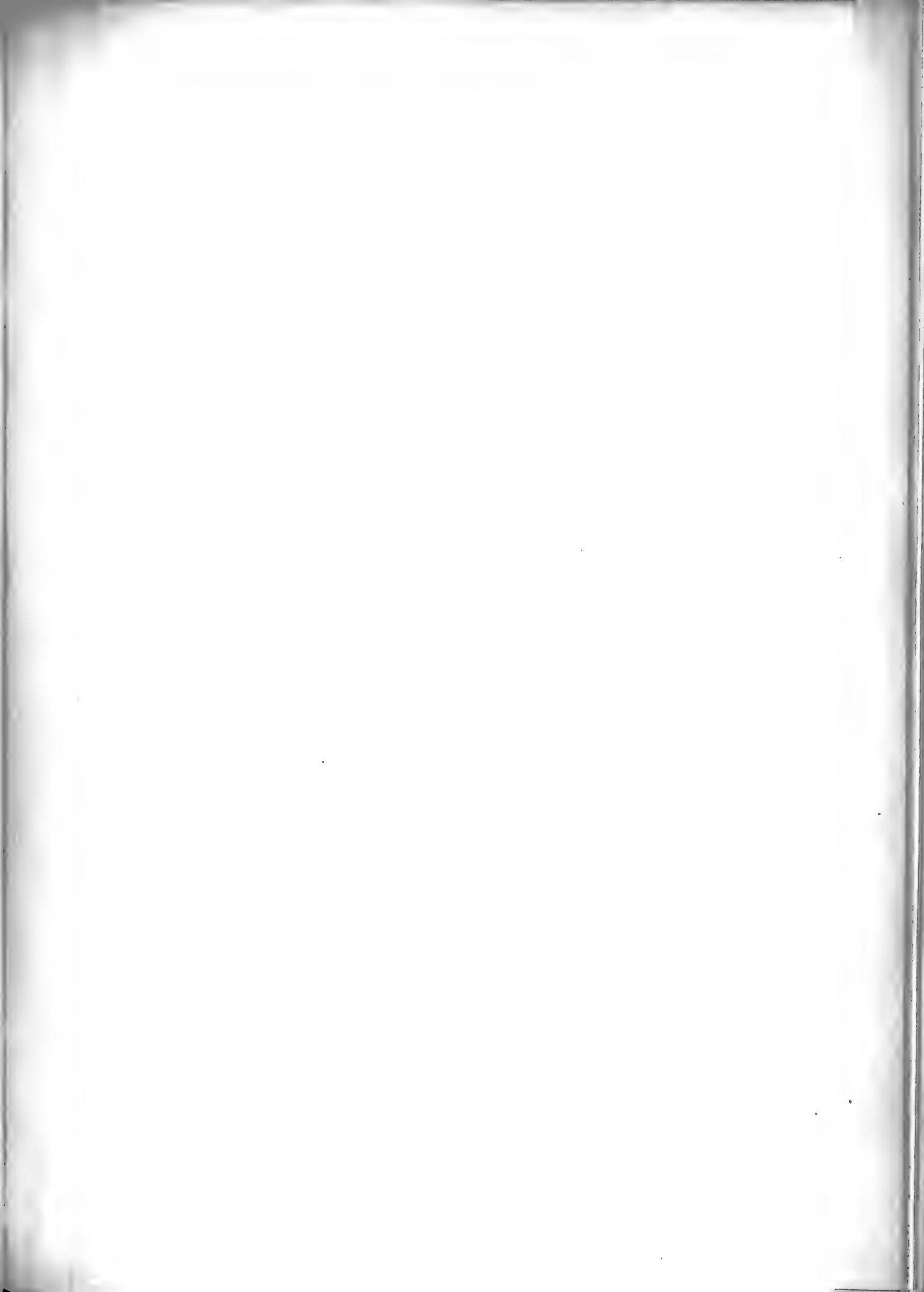
*Haifa, December, 1888.*

## THE "VIA MARIS"

### A REPLY.

IN the July number (1888) of the *Quarterly Statement*, the Rev. Ch. Druitt wishes to have explained "the ground for my identification of the Via Maris of antiquity with the caravan road which bisects Upper Jaulân in the direction of 'Acca and Haifa."

I have to state that I followed the opinion of Ritter, who, in his description of the upper and central Jordan districts ("Erdkunde," xv, a, "Palastina und Syrien" II, a, pp. 269-272) states that the central of the three large (northern, central, and southern) caravan roads which connected Damascus with the lands of the Kanaanites, passed by the fortified Jisr and Khân Benât Y'akûb, and, coming from Damascus or the Euphrates Valley, and crossing the Jordan at this bridge, took a southern course to the Sea of Galilee, to the important custom house Capernaum, and from here to the Mediterranean Sea. Its name, Via Maris or "Road to the Sea," "Sea-Road," may have therefore been derived either from the Sea of Galilee, or the Mediterranean; see also Gesenius ("Comment. zu Jesaias," Th. I, pp. 350-354) for further proofs. That this very important sea road, which during the middle ages was used by caravans from Damascus to Phœnicia, was meant by Quarësmius ("Eleucid. Terr. Setae," T. I, Lib. I, c. 8, fol. 19) when he said "via maris publica quedam via est, qua venit ex Assyria ad mare mediterraneum," can be proved by a look on the map: the high road I marked as Via Maris on the Jaulân map, leaves Damascus, and follows the level Haurân plateau (or rather Jeidûr) to S'asâ and continues in a straight line to el Kuneitra, and from here as direct as possible through the Jaulân to the Jisr Benât Y'akûb, from here it follows the Jordan course along the slopes forming the western banks of the river until it arrives at the ruined Khân Minyeh (by some supposed to be Capernaum) which lies very near the Sea of Galilee. Here, or at Khân Jubb Yûsef, a ruin a little north of Khân Minyeh, the high road must



3A BY  
 BOUT 50

|       | M.       |
|-------|----------|
| Mean. | Dry Bulb |
| 3.5   | 51       |
| 1.2   | 53       |
| 0.0   | 62       |
| 1.4   | 66       |
| 3.0   | 72       |
| 3.3   | 79       |
| 5.7   | 81       |
| 3.8   | 84       |
| 1.4   | 83       |
| 3.0   | 78       |
| 1.4   | 66       |
| .1    | 56       |
| 5.7   | 69       |
| 1     | 12       |

MONTHLY METEOROLOGICAL TABLE DEDUCED FROM OBSERVATIONS TAKEN AT SARONA BY HERR J. DREHER IMMEDIATELY NORTH OF THE GREAT ORANGE GROVES OF JAFFA, SYRIA, 1½ MILE FROM THE SEA SHORE, ON SANDY SOIL, AND ABOUT 50 FEET ABOVE SEA-LEVEL. LATITUDE 32° 4' N., LONGITUDE 34° 47' E.

By JAMES GLAISHER, F.R.S.

| Months, 1883.       | Pressure of Atmosphere in Month.<br>Corrected to 32° Fahrenheit. |               |              |               | Temperature of the Air in Month. |         |        |                      |                     |                   |       | Mean Reading at 9 a.m. |           |            | Vapour, 9 a.m.           |                                |  | Degree of Humidity. | Weight of a Cubic Foot of Air. | Wind.                  |           |           |            |            |            |            |           |                       | Mean Amount of Cloud. | Rain.                            |                   |
|---------------------|--|---------------|--------------|---------------|----------------------------------|---------|--------|----------------------|---------------------|-------------------|-------|------------------------|-----------|------------|--------------------------|--------------------------------|--|---------------------|--------------------------------|------------------------|-----------|-----------|------------|------------|------------|------------|-----------|-----------------------|-----------------------|----------------------------------|-------------------|
|                     | Highest.   | Lowest.       | Range.       | Mean.         | Highest.                         | Lowest. | Range. | Mean of all Highest. | Mean of all Lowest. | Mean daily Range. | Mean. | Dry Bulb.              | Wet Bulb. | Dew Point. | Elastic Force of Vapour. | Weight in a Cubic Foot of Air. | Additional Weight required for Saturation. |                     |                                | Relative Proportion of |           |           |            |            |            |            |           | Calm, or nearly Calm. |                       | Number of Days on which it fell. | Amount Collected. |
|                     |  |               |              |               |                                  |         |        |                      |                     |                   |       |                        |           |            |                          |                                |  |                     |                                | N.                     | N.E.      | E.        | S.E.       | S.         | S.W.       | W.         | N.W.      |                       |                       |                                  |                   |
|                     |  |               |              |               |                                  |         |        |                      |                     |                   |       |                        |           |            |                          |                                |  |                     |                                |                        |           |           |            |            |            |            |           |                       |                       |                                  |                   |
| January .. ..       | in.<br>30·088  | in.<br>29·527 | in.<br>0·561 | in.<br>29·838 | 78°·0                            | 39°·0   | 39°·0  | 64°·4                | 48°·7               | 15°·7             | 56°·5 | 54°·4                  | 51°·9     | 49°·4      | grs.<br>·353             | grs.<br>4·0                    | grs.<br>1·1                                | 83                  | grs.<br>538                    | 4                      | 2         | 1         | 4          | 6          | 9          | 3          | 0         | 2                     | 7·2                   | 20                               | ins.<br>11·32     |
| February .. ..      | 30·099   | 29·624        | 0·475        | 29·924        | 72°·0                            | 41°·0   | 31°·0  | 62·8                 | 45·6                | 17·2              | 54·2  | 53·4                   | 51·2      | 49·0       | ·347                     | 4·0                            | 0·7  | 85                  | 539                            | 1                      | 2         | 1         | 6          | 2          | 7          | 0          | 0         | 9                     | 6·2                   | 14                               | 3·71              |
| March .. ..         | 30·060   | 29·631        | 0·429        | 29·838        | 97°·0                            | 35°·0   | 62°·0  | 70·5                 | 49·4                | 21·1              | 60·0  | 62·0                   | 55·8      | 50·4       | ·367                     | 4·1                            | 2·1  | 66                  | 529                            | 2                      | 0         | 0         | 0          | 7          | 4          | 2          | 0         | 16                    | 4·2                   | 7                                | 2·52              |
| April .. ..         | 30·042   | 29·533        | 0·509        | 29·775        | 95°·0                            | 40°·0   | 55°·0  | 72·8                 | 50·0                | 22·8              | 61·4  | 66·7                   | 59·4      | 53·5       | ·410                     | 4·5                            | 2·7  | 63                  | 523                            | 0                      | 0         | 0         | 0          | 4          | 3          | 4          | 1         | 18                    | 4·2                   | 3                                | 0·52              |
| May.. ..            | 29·953   | 29·635        | 0·318        | 29·801        | 99°·0                            | 48°·0   | 51°·0  | 76·7                 | 55·2                | 21·5              | 66·0  | 72·0                   | 65·0      | 59·7       | ·514                     | 5·6                            | 2·9  | 65                  | 517                            | 1                      | 1         | 0         | 0          | 0          | 7          | 4          | 1         | 17                    | 3·2                   | 0                                | 0·00              |
| June .. ..          | 29·805   | 29·666        | 0·139        | 29·735        | 89°·0                            | 59°·0   | 30°·0  | 83·1                 | 63·6                | 19·5              | 73·3  | 79·4                   | 71·9      | 66·8       | ·656                     | 7·1                            | 3·6  | 66                  | 509                            | 0                      | 1         | 1         | 1          | 0          | 8          | 4          | 1         | 14                    | 1·9                   | 0                                | 0·00              |
| July.. ..           | 29·771   | 29·597        | 0·174        | 29·689        | 88°·0                            | 63°·0   | 25°·0  | 84·4                 | 67·0                | 17·4              | 75·7  | 81·9                   | 73·7      | 68·3       | ·690                     | 7·4                            | 4·3  | 64                  | 505                            | 0                      | 0         | 0         | 0          | 0          | 16         | 12         | 0         | 3                     | 2·9                   | 0                                | 0·00              |
| August .. ..        | 29·803   | 29·563        | 0·240        | 29·697        | 92°·0                            | 65°·0   | 27°·0  | 88·2                 | 69·4                | 18·8              | 78·8  | 84·6                   | 75·2      | 69·0       | ·711                     | 7·5                            | 5·1  | 59                  | 502                            | 0                      | 0         | 0         | 0          | 0          | 9          | 7          | 3         | 12                    | 2·7                   | 0                                | 0·00              |
| September .. ..     | 29·901   | 29·607        | 0·294        | 29·748        | 106°·0                           | 58°·0   | 48°·0  | 87·7                 | 61·0                | 27·7              | 74·4  | 83·4                   | 73·5      | 67·0       | ·660                     | 7·0                            | 5·1  | 58                  | 505                            | 6                      | 0         | 0         | 0          | 0          | 8          | 0          | 2         | 14                    | 2·1                   | 0                                | 0·00              |
| October .. ..       | 29·977   | 29·751        | 0·226        | 29·886        | 94°·0                            | 53°·0   | 41°·0  | 84·1                 | 61·8                | 22·3              | 73·0  | 78·4                   | 69·9      | 64·0       | ·597                     | 6·5                            | 4·0  | 62                  | 512                            | 1                      | 2         | 2         | 0          | 4          | 3          | 1          | 0         | 18                    | 4·9                   | 5                                | 1·36              |
| November .. ..      | 30·020   | 29·687        | 0·333        | 29·895        | 84°·0                            | 49°·0   | 35°·0  | 74·3                 | 54·5                | 19·8              | 64·4  | 66·4                   | 61·7      | 58·0       | ·481                     | 5·4                            | 1·9  | 74                  | 525                            | 0                      | 0         | 1         | 3          | 13         | 1          | 1          | 0         | 11                    | 5·1                   | 11                               | 8·14              |
| December .. ..      | 30·106   | 29·705        | 0·401        | 29·924        | 76°·0                            | 40°·0   | 36°·0  | 65·7                 | 46·6                | 19·1              | 51·1  | 56·3                   | 53·4      | 50·8       | ·371                     | 4·1                            | 0·9  | 81                  | 536                            | 0                      | 1         | 1         | 12         | 9          | 1          | 0          | 0         | 7                     | 5·3                   | 11                               | 2·49              |
| Means .. ..         | 29·969   | 29·627        | 0·342        | 29·818        | 89·2                             | 49·3    | 40·0   | 76·2                 | 56·1                | 20·2              | 65·7  | 69·9                   | 63·6      | 58·9       | ·513                     | 5·6                            | 2·9  | 69                  | 520                            | Sum.<br>15             | Sum.<br>9 | Sum.<br>7 | Sum.<br>26 | Sum.<br>45 | Sum.<br>76 | Sum.<br>38 | Sum.<br>8 | Sum.<br>141           | 4·2                   | Sum.<br>71                       | Sum.<br>30·96     |
| Number of Column .. | 1  | 2             | 3            | 4             | 5                                | 6       | 7      | 8                    | 9                   | 10                | 11    | 12                     | 13        | 14         | 15                       | 16                             | 17   | 18                  | 19                             | 20                     | 21        | 22        | 23         | 24         | 25         | 26         | 27        | 28                    | 29                    | 30                               | 31                |

have bifurcated, taking in one sense a southern direction to the city of Tiberias, to Beisân (Beth Shean, Scythopolis), &c., and in the other sense a western course to the ports of the Mediterranean, to 'Acca of the Phœnicians, by the way of the plain and the Wady 'Abellin, or if bifurcating at the Khân Jubb, Yûsef by the way of Râmeh and Mejd el Kerûm (to 'Acca).

At all of these places mentioned, as well as along the course of the road through Jaulân, the different Khâns or Caravanserais, through the Buttauf and W. 'Abellin, at Râmeh and other sites, we find distinct remains of paved Roman roads ; the direction of the road from Damascus to 'Acca is straight, and the nearest route possible ; the regions it crosses are plateaus, plains and level countries, in fact a country which, although now desolated and covered with ruins, is and was designated by nature to be a great commercial highway. Considering all these facts in favour of the opinions given with regard to the Via Maris, and considering that all other roads from Damascus to the Sea, to Tyre and Sidon, &c., have to pass mountainous regions and winding passages, I find no objection of identifying the "Via Maris" in its general features, and in the sense named during the middle ages with the present commercial and caravan road from Damascus to the Jisr Benât Yakûb or by Khân Miniyeh to 'Acca and Haifa, all the more as we can see from the commerce of the 11th, 12th, and 13th centuries, as given in the excellent work of Heyd, "*Die italienischen Handelscolonien in Palaestina*" (I, p. 16, 17 ff.), that the city of 'Acca had a great interest in the Indian commerce, that products of India found their way through the Euphrates Valley to the great Emporium of Damascus, and continuing *by the shortest way* to Beirut and 'Acca, and that the weapons and arms of Damascus manufacturers were exported to Egypt by the port of 'Acca ; on the other side Haifa formed the natural harbour for Tiberias ("Heyd," I, p. 17, which city (Tiberias) "was industrious and had a lively trade by caravans."

G. SCHUMACHER.

## METEOROLOGICAL OBSERVATIONS.

SARONA, 1883.

THE numbers in column 1 of this table show the highest reading of the barometer in each month ; the maximum for the year was 30.106 ins., in December. In the years 1880 and 1881 the maximum was in January, in 1882 it was in February ; the mean of the three preceding highest pressures was 30.251 ins.

In column 2, the lowest reading in each month is shown ; the minimum for the year was 29.527 ins., in January. In the year 1880 the minimum was in April, in 1881 in February, and in 1882 in July ; the mean for the three preceding years was 29.519 ins.

The range of barometric readings in the year was small, being

0.579 in. only. The numbers in the 3rd column show the range of readings in each month; the smallest, 0.139 inch, was in June, and the largest, 0.561 inch, was in January.

The numbers in the 4th column show the mean monthly pressure of the atmosphere; the greatest, 29.924 ins., occurred both in February and December, and the smallest, 29.689 ins., was in July.

The highest temperature of the air in each month is shown in column 5. The highest in the year was  $106^{\circ}$ , in September, the next in order was  $99^{\circ}$  in May, and  $97^{\circ}$  in March; in the three preceding years, viz., 1880, 1881, and 1882, the highest temperatures were  $103^{\circ}$ ,  $106^{\circ}$ , and  $93^{\circ}$  respectively; the first day in the year 1883 the temperature reached  $90^{\circ}$  was on the 30th of March, and it was  $97^{\circ}$  on the next day; in April the temperature exceeded  $90^{\circ}$  on one day; in May on one day; in August it reached or exceeded  $90^{\circ}$  on six days; in September there were five days when the temperature reached or exceeded  $90^{\circ}$ ; the highest in the year,  $106^{\circ}$ , took place on the 30th; in October, on the 29th, the temperature reached  $94^{\circ}$ , and this was the last day in the year that the temperature was as high as  $90^{\circ}$ ; therefore the temperature reached or exceeded  $90^{\circ}$  on 16 days; in 1880 on 36 days, in 1881 on 27 days, and in 1882 on 8 days in the year.

The numbers in column 6 show the lowest temperature in each month; the lowest temperature in the year was  $35^{\circ}$  in March, the next in order was  $39^{\circ}$  in January, and  $40^{\circ}$  both in April and December; in January there was only one day when the temperature was below  $40^{\circ}$ , and in March on one day, when it was as low as  $35^{\circ}$ , on the 17th; it was not below  $40^{\circ}$  in any other month of the year; therefore the temperature was below  $40^{\circ}$  on only two nights in the year; in the year 1880 it was below  $40^{\circ}$  on 16 nights, in 1881 on 2 nights, and in 1882 on 14 nights.

The yearly range of temperature was  $71^{\circ}$ ; the range of temperature in the year 1880 was  $71^{\circ}$ , 1881 was  $67^{\circ}$ , and 1882 was  $59^{\circ}$ .

The range of temperature in each month is shown in column 7, and these numbers vary from  $25^{\circ}$  in July to  $62^{\circ}$  in March.

The mean of all the highest temperatures by day, of the lowest by night, and of the average daily ranges of temperature, are shown in columns 8, 9, and 10, respectively. Of the high day temperatures, the lowest appears in February,  $62^{\circ}8$ ; and the highest in July,  $88^{\circ}2$ ; that in August is nearly of the same value. Of the low night temperatures the coldest,  $45^{\circ}6$ , took place in February; and the warmest,  $69^{\circ}4$ , in August. The average daily range of temperature, as shown in column 10, in January  $15^{\circ}7$  is the smallest, and in September  $27^{\circ}7$  is the greatest.

In column 11, the mean temperature of each month, as found from observations of the maximum and minimum thermometers only are shown. The month of the lowest temperature is December,  $51^{\circ}1$ ; in the year 1880 the month of the lowest temperature was January,  $50^{\circ}7$ ; and in the years 1881 and 1882 the lowest were in February, viz.,  $56^{\circ}2$  and  $49^{\circ}8$  respectively; the mean for the three years being  $56^{\circ}2$ . The month of the highest temperature was August,  $78^{\circ}8$ ; in the years 1880, 1881 and 1882,

the maximum was in August, and were  $79^{\circ}$ ,  $80^{\circ}1$ , and  $78^{\circ}6$  respectively. The mean for the three years was  $79^{\circ}2$ . The mean temperature for the year was  $65^{\circ}7$ , for the three preceding, viz., 1880, 1881, and 1882, were  $66^{\circ}4$ ,  $66^{\circ}7$ , and  $65^{\circ}5$  respectively.

The numbers in columns 12 and 13 are the monthly means of a dry and wet-bulb-thermometer, taken daily at 9 a.m., and those in column 14 are the monthly temperature of the dew-point, or that temperature at which moisture would have been deposited. The elastic force of vapour is shown in column 15; in column 16 is shown the weight of the water present in a cubic foot of air; in January this was as small as four grains, and in August as large as  $7\frac{1}{2}$  grains. The numbers in column 18 show the degree of humidity, saturation of the air being considered 100; the smallest number indicating the driest month, was 57 in September, and the largest 85, in February. The weight of a cubic foot of air under its mean pressure, temperature, and humidity, at 9 a.m., is shown in column 19.

The most prevalent winds in January were S. and S.W., and the least prevalent were E. and N.W. In February the most prevalent were S.E. and S.W., and the least were W. and N.W. In March the most prevalent was S., and the least were N.W., E., and its compounds. From April to September the S.W. winds were most prevalent, and the least prevalent winds generally were N., E., and compounds of E. In October the most prevalent was S., and the least was S.E. In November the most prevalent was S., and the least prevalent were N. and its compounds; and in December the most prevalent winds were S.E. and S., and the least prevalent were N., W., and N.W. The most prevalent wind for the year was S.W., which occurred on 76 times during the year, of which 16 were in July, and 9 in both January and August; and the least prevalent wind for the year was E., which occurred on only 7 times during the year, of which two were in October, and one in each of the months of January, February, June, November, and December.

The numbers in column 29 show the mean amount of cloud at 9 a.m., the month with the smallest amount is June, and the largest January. Of the cumulus, or fine weather cloud, there were 119 instances in the year; of these there were 21 in August, 20 in July, and 13 in September, and only 3 in December. Of the nimbus, or rain cloud, there were 63 instances, of which 18 were in January, 12 in February, and 11 in December, and 3 only from April to September. Of the cirrus, there were 22 instances. Of the stratus there were 24 instances. Of the cirro-cumulus there were 39 instances. Of the cirro-stratus 14 instances in the year, and 84 instances of cloudless skies, of which 14 were in June, 13 in May, and 11 in March.

The largest fall of rain for the month was 11.32 ins. in January, of which 1.31 inch fell on the 9th, and 1.30 inch on the 8th; and the next largest fall for the month was 8.14 ins. in November, of which 3.13 ins. fell on the 3rd, and 1.31 inch on the 25th. In 1880 the largest fall in any month was 10.05 ins. in December; in 1881 the largest was 5.09 ins.

in November, and in 1882 the largest was 7.22 ins. in February. No rain fell from April 25th till October 10th, making a period of 167 consecutive days without rain. The fall of rain in the year was 30.06 ins., being 1.38 in., 12.57 ins., and 7.97 ins. larger than the falls in 1880, 1881, and 1882 respectively; and the mean fall of rain for the three preceding years was 22.55 ins. The number of days on which rain fell was 71, in 1880 rain fell on 66 days, in 1881 on 48 days, and in 1882 on 62 days.

JAMES GLAISHER.

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## NOTES BY MAJOR CONDER, R.E.

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### I.

#### PROFESSOR SAYCE ON THE HITTITES.

THE Religious Tract Society have published an interesting little book by Professor Sayce on the Hittites, which will no doubt aid to instruct the general public, though it contains nothing new to scholars. With the greater part of its contents I am fully in accord, but there are occasional statements which should, I think, at once be questioned before they become widely adopted, in the interest of exact archaeology; and I hope that these lines may meet Professor Sayce's eye, and induce him to explain or to reconsider the points in question.

When Professor Sayce states that the Hittite monuments are still undeciphered, he, no doubt, expresses his present opinion. In that case he must be supposed to have withdrawn the claim which he made in 1884, to have deciphered and translated several of the texts, as given in a lengthy article in "Wright's Empire of the Hittites." To these translations he makes no reference in his present volume. When, however, he says that "Major Conder's system of decipherment has not yet obtained the adhesion of other scholars," I may be allowed to remark that at least two scholars have informed me that they believed me to be right as to the language, and these scholars perhaps better acquainted with Turanian languages than any others in England. In his last letter one of them says of my recent paper in the *Quarterly Statement* that it "marks a distinct advance, and places the comparisons on a firm foundation."

Professor Sayce makes other statements as below:—

Page 12. "Hamath and Kadesh on Orontes being their most southerly points." He, apparently, is unaware that Sir C. W. Wilson discovered a Hittite monument at Damascus.

Page 15. "The Hittites were a people with yellow skins and Mongoloid features" (repeated p. 101 yet more strongly). This is what I have always urged. Why, then, dispute the probability that their language also may have been Mongolian? It appears, however (p. 134), that "the



Vannic may belong to the same family of speech." Now, as regards Vannic, we have the opinion of a good Akkadian scholar (Bertin, "Languages of the Cuneiform Inscriptions"), that Medic, Vannic, and Akkadian belong to the same family of ancient agglutinative speech. Professor Sayce makes no further allusion to Georgian in his present work, which is perhaps due to the fact that no known Hittite name or word has ever been found comparable with Georgian.<sup>1</sup>

Page 15. The Amorites are described as having "white skins, blue eyes, and reddish hair."<sup>2</sup> Yet, when we turn to Mr. F. Petrie's list, we find the Amaur described as having "red" skins; and the blue eyes are attributed to the Kheta. It is by no means certain that the colours have retained their original hue. The only people marked as "white or yellow" in Mr. Petrie's list are the Shairdana, and the red hair is not attributed to the Amaur. Some Kheta are described as having "green hair"! It is certain that in some cases the colouring is merely decorative, and in others faded.

Mr. Tomkins quotes Mr. Osborn as making the Amorites blue-eyed, but this seems, according to Mr. Petrie's list, to be a mistake. The hair, according to this description, was black ("Times of Abraham," p. 85), and the complexion sallow. My own belief is that the Amorites were a Semitic tribe; but, at all events, the idea of a fair people in Palestine rests on no real foundation.

Page 46. The Patinians are said to have been a people of "Hittite descent." I am not aware of any authority for this.

Page 49. The Assyrians are said to have used the name Hittite "no longer in a correct sense." Yet they only say that the town of Ashdod was Hittite, and there is no historic improbability in the existence of Hittites in this part of Palestine in very late times. Surely the Assyrian scribe knew better than we can know.

Page 6. Professor Sayce adheres to his favourite term, the "Hittite Empire," but has explained it to mean little more than a confederacy such as we know from the monuments did exist between the Kheta and other tribes. The "forgotten Empire," however, is now disappearing, the Lydian and Medic Kingdoms being the real authors of the Asia Minor civilisation, and the Medic and Lydian races being of the same stock with the Kheta. Herodotus probably knew more about Asia Minor than we can hope to learn by theories unsupported by the evidence either of literature or of inscriptions. He knew of non-Semitic Syrians, of Lydians, Carians, and Medes, before the Aryans came from Greece and from Persia; but he knew nothing of a "Hittite Empire," nor do the cuneiform or Egyptian texts mention any Hittites save in Syria.

<sup>1</sup> The sounds for king and country in Hittite appear to have been *Ko* and *Me*. In Georgian, the word for king is *Mephe*, and for country *Obai*, which evidently do not aid us.

<sup>2</sup> Prof. Sayce, in the "Academy," speaks of fair people in Palestine. There is no native stock in Palestine which is fair, but there is a certain admixture of Aryan blood in the country, probably of very recent origin.

Page 78. "The mural crown" is not known on Hittite monuments. The bonnets worn by the goddesses at Boghaz Keui are similar to those now worn by Tartar women.

Page 80. The "double-headed axe" was not peculiar to Hittites. It was used by Carians and by Etruscans.

Page 81. Professor Sayce calls the turned-up boot a snow-shoe, a mocassin (p. 140), and a Turkish shoe—three entirely distinct things. It was known to the Egyptians and Etruscans as well as to the Hittites.

Page 81. The hieroglyph for country represents "two or sometimes three pointed mountains." It only occurs twice, and neither of these cases have three peaks. Professor Sayce considers Hittite and Egyptian quite distinct systems, and states that in the latter animals are represented by whole figures, but in Hittite by heads only. Yet we have already two cases in Hittite of whole figures of animals, while heads of animals are not uncommon in the earlier Egyptian texts. With increased graphic power the whole figure seems to have been attempted, and the distinction is not complete.

Page 102. The pigtail (first noticed by the late Dr. Birch) convinces Professor Sayce of the Mongol origin of the Kheta, yet he never mentions the Mongol words recoverable of their language.

Page 111. "Tar or Tarku, 'the king,' who is the Zeus of Lucian." Professor Sayce does not give any reason for rendering Tarku "king." The readers of the *Quarterly Statement* will be aware (January, 1889), that this is a Mongol and Turkic word for king.

Page 115. "The art of the Hittites was essentially Babylonian in origin." This is just what I urged when comparing them with the Akkadians.

Page 117. The Sphinxes of Eyuk are compared with the Egyptian Sphinx. But on an Akkadian cylinder we have also two Sphinxes represented, and others in Etruria and Phœnicia.

Page 120. The lions of Mycenæ are called "Hittite." To me it seems more likely that they were Pelasgic, and the Pelasgi must—judging from the word *Tepæ*, said by Varro to mean "mountains"—have been a Turkic people like Medes, Akkadians, Lydians, and Carians.

Page 129. Tarkon is said to be a "distinctive Hittite word." If so, the evidence of comparative vocabularies shows the Hittite language to have been Turkic.

Page 130. The four strokes for *me* on the boss of Tarkutimme are said to represent the "numeral four." We are not told in what language four has the sound *me*. In Georgian the sound is *Othkhi*. I have shown that this sign does not on the Hittite monuments represent a numeral, because it is a suffix. We have a plural suffix *me*, and this, I believe, is the true value of the sign.

Page 130. There is no evidence at all that the Carchemish monuments contain the names of any kings. As to the "King whose name ends -me Tarku," Professor Sayce has stated that Tarku was Jupiter (p. 111).

Page 132. Although Professor Sayce believes the syllabary of Cyprus to be derived from the Hittite, he makes no mention of the recovery of fifty sounds of the language thus made possible. Hence he has made no use of the very method whereby the study of cuneiform was first made possible and the Akkadian language discovered.

Page 135. *Irkhulena*, "the moon god belongs to us," is a funny name for a man. It seems to me more like Turkish *Er*, "man," and *Khulin* "great," i.e., "the hero" or Hercules.

Professor Sayce's volume therefore represents the Hittites minus their language, which language he has not attempted to compare with any other, though we have Carian words like *Kos* and *Taba*, Lydian words like *Tegoun* and *Lailas*, Etruscan words like *Tarquin*, &c., &c., comparable with the old *Medic* and Akkadian, and showing us an early Turkic people in Asia Minor to whom the Hittites were akin.

Curiously enough, Professor Sayce has since written from Egypt ("Academy," 19th January, 1889), to say he has a letter in what he thinks is a Hittite dialect, and that the "verbal forms are Akkadian." Should he adhere to this view he will, perhaps, withdraw his previous statement that "no scholar is likely to admit" a comparison of Hittite and Akkadian. He is also now inclined to believe in more than one "Hittite" language. In Asia Minor, in 500 B.C., I believe four languages were spoken:—(1) Greek; (2) Lycian (akin to Zend); (3) Phrygian (akin to Armenian); (4) Lydian and Carian (akin to Turkish). This is a distinction sanctioned not only by Herodotus, but by relics of these languages. Of these, however, 1, 2, 3 were later in reaching the country than No. 4.

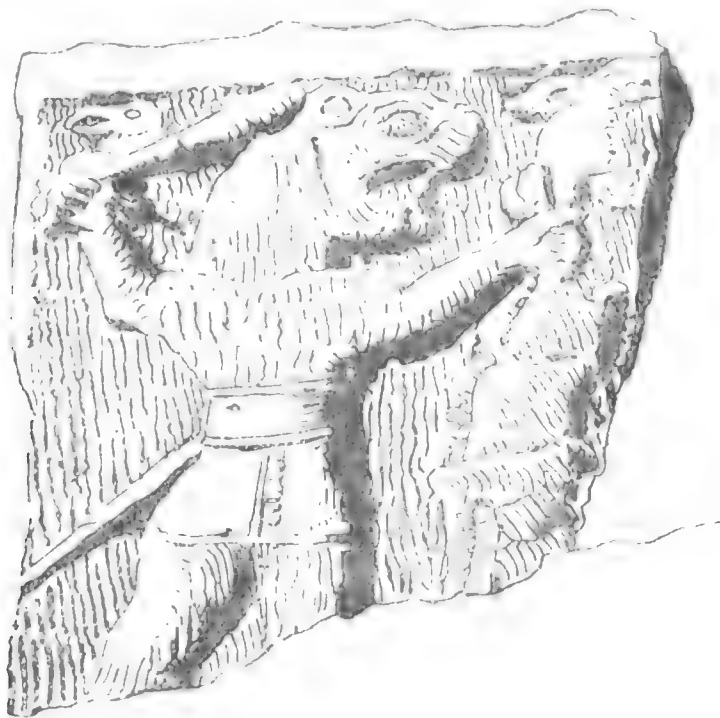
When Professor Sayce claims to have "laid the foundation" of Hittite knowledge, it must not be forgotten that Dr. Wright first broached the idea in connection with the Hamath stones, and that Chabas and other scholars had written at length on the Kheta in 1866, Professor Sayce's first paper being ten years later. No one, however, would wish to dispute the value of Professor Sayce's contributions to the subject in many particulars.

## II.

### THE SO-CALLED HITTITE MONUMENTS OF KELLER.

THE monuments at Keller, or Sinjirli, west of 'Ain Tab, at the north extremity of Syria, are mentioned in "Altaic Hieroglyphs," and photographs were kindly sent to me by Mrs. Barnes. They are given by Perrot in his "History of Art," in 1886, and have recently been published from the photographs by Professor Sayce; but one slab, of which I here give a copy from the photograph, seems to have escaped notice, and is very important, as it has a hieroglyphic in the corner, which none of the rest have.

The lion-headed deity is here shown in the short tunic common to other Cappadocian bas-reliefs, holding a rabbit (or perhaps a fawn, but



there seem to be no hoofs) by the hind legs. The attitude is just that of a deity represented on a bas-relief at Amrit, in Phœnicia, standing erect on a lion. He is human headed, but holds the small animal in like manner, and waves a sword. The lion-headed god is also twice represented near Pteria, in Cappadocia. He is well known as Nirgal (his Akkadian name, Assyrian *Nirgallu*), in Babylonia, and also found in India (as Yama) and in Egypt.

The hieroglyph in the corner is the head either of a rabbit (as on the Merash lion) or of an ass (as at Pteria, Carchemish, &c.). It is probably the name of the god, and, as I explained in "Altaic Hieroglyphs," both the ass's head and the hare's head are known on the "Hittite" monuments, with the sign of deity above. It appears that the name of the lion-headed deity had the same sound as the word ass; and I have recently described a cylinder, brought home by Mr. Greville Chester, on which a lion is represented (*see* "Altaic Cylinders," in *P. E. F. Quarterly Statement*, 1888) with the head of an ass as a hieroglyph above it. This curious lion-headed god is another link between the Akkadians and the early tribes of Syria and Cappadocia, whom antiquaries call "Hittite," though some bore other names.

The figures in the bas-relief given herewith, from the same site, are of special interest, though there is no writing on the blocks. A prisoner is brought—by his pigtail—by a long-robed, bearded personage. The beard in this case is—as at Ibreez—in the Phœnician fashion, without the heavy moustache of the Assyrians. The outline of the faces is just

that of the Akkadians of Tello, on a bas-relief published by the French explorer De Sarzek.



Both these figures have the *Calceus repandus*, but the next figure to the right wears sandals. This figure is also bearded, but wears a very distinct, well-plaited pigtail, not unlike that worn by some of the Elamites, in the great battle-picture in the British Museum. This group is part of a long subject, including a stag and a doe, at which the bowman shoots, a winged griffon, ramping erect, and a man with a hammer or axe, which appears to have been an Asia Minor weapon. This axe was called *Labros* in Carian and Lydian speech—a word for which I have been as yet unable to find any equivalent.

We are possibly on the verge of further discovery as regards these ancient populations. Meantime I regard it as shown, by the surviving words of their language, that the Lydians, Carians, and Pelasgi, like the Etruscans, were a Turanian people, akin to the Medes and Akkadians. The Phrygians were not—they were Aryans from Europe. The Lycians, who were “modern” in the time of Herodotus, spoke a liquid language akin to Zend and to Persian; but these Aryan tribes were non-existent in Asia Minor, probably in 700 B.C., and the archaic monuments of Cappadocia seem to be the work of the same race that has left monuments in Ionia, and which was no doubt the old Lydian Carian race.

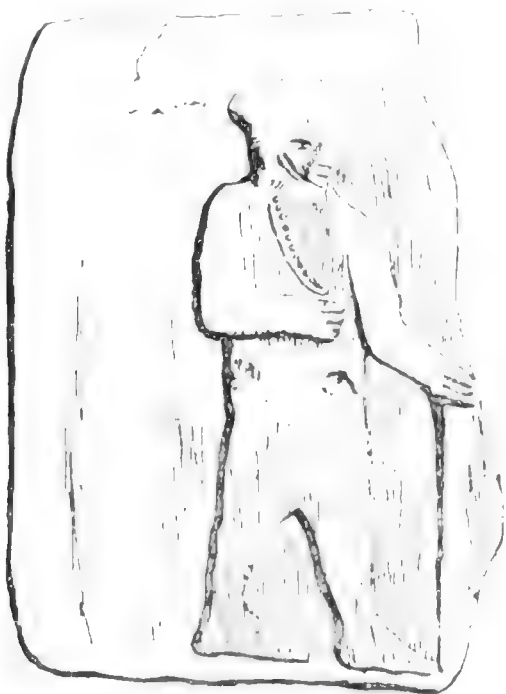
### III.

#### THE TELL ES SALAHÎYEH MONUMENT.

SIR C. W. WILSON has kindly allowed me to trace the photograph of the very archaic monument discovered in his excavations at Tell es Salahiyeh, near Damascus. It is one of the rudest and most archaic

known in Syria, and in general character resembles those monuments which antiquaries now call "Hittite."

It should be noted that the cap seems to have the shape which on the Egyptian monuments distinguishes the Pulestha (Philistines) and Takrui (probably Teucrians). It is also to be noted that the beard without moustache is represented as on the Ibreez monument, which has a "Hittite" inscription, and also on the monument of Keller. This fashion of wearing the beard prevailed extensively in Phœnicia and Asia Minor and among Greeks. The Assyrian sculptures, on the other hand, usually represent a moustache.



This is the most southern of the monuments of this class yet known. There is a remarkable monument at Amrit, in Syria, usually called Phœnician, representing a god standing erect on a lion, which may be of the same class, and the rude and archaic Hercules of Amathus—a gigantic statue now in the porch of the Constantinople Museum—a horned and bearded god, may also be what is called "Hittite." This deity, like the lion-headed god of Keller, is holding up an animal by the hind legs, but the head of the animal is lost. Probably he is represented tearing the animal asunder as fawns were torn in honour of Dionysus—a kind of sacrifice which also existed in China. A very good drawing of this Amathus statue, which should be compared with the present sketch, occurs in Perrot's "*Histoire de l'Art*," in the Phœnician volume.

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## IV.

## THE SO-CALLED "HITTITE" HAT.

THE cone-shaped hat on the monuments of Cappadocia and Ionia approaches in form the high tiara worn by Kheta Sar on an Egyptian bas-relief, and is a fairly distinctive article of costume. The following notes are, therefore, of some interest, perhaps, as indicating the race which wore this hat. Herodotus says (vii, 64) :—

"The Sacæ, who are Seythians, had on their heads caps which came to a point and stood erect."

In Italy, also, the Tutulus is described by Varro (*see* Dennis, "Etruria," i, p. 341) as a high white cap of the shape of a cone (*meta*) worn on the heads of priests. The Flamens wore a wool cap of the same form—perhaps not unlike the Astrakhan hat of the Circassians. An Etruscan goddess is represented in a high cap of this kind, with four wings, and holding a hen (ii, p. 465).

In the travels of Rubuquis in 1255 A.D., in Tartary, we find similar hats described.

"They have an ornament for their heads," says the good monk, describing the nomadic people of South Russia, "which they call *Botta*, which is made of the bark of a tree, or of some such substance as they can find, which by the thickness and roundness thereof cannot be held but in both hands together, and it hath a square sharp spire rising from the top thereof, being almost two feet in length, and shaped like a pinnacle. This *Botta* they cover all over with a piece of rick silk, and it is hollow within, and upon the midst of this same spire they place a bunch of quills, or slender canes, a foot and a half long or more, and the bunch on the top thereof they beautify with peacocks' feathers, and round about they stick the feathers of a mallard's tail and adorn it with precious stones. Also great ladies wear this kind of ornament on their heads, binding it strongly to a kind of hat or coif which hath a hole in the crown fit for the spire to come through."

A hat of this kind, but edged with fur, is still worn by the dervishes in Turkestan (*see* Schnyler's "Turkestan," frontispiece, vol. ii), but is not more than about a foot in height. The Maulawiyeh dervishes in Syria also wear a somewhat similar hat, but it is a truncated cone made of fine felt, and with the green turban sometimes wound round it. The cone was also worn by the Turks in the 18th century with the Moslem turban wound round it (*see* portrait of Hassan Pasha in the "Modern Traveller, Syria," vol. i, p. 25). Thus the old Seythian headdress of the Cappadocian monuments has been worn in various ages by Turanian peoples, and still survives in our own time.



## V

## THE STONE ZOHELETH.

As to whether the word Eben can apply to a rock (a question more than once raised of late), Gesenius may be held to be a respectable authority. In his lexicon he gives, under  $\text{זֶהֱלֶֿת}$  (1) "a stone of any kind," (2) a "a gem," (3) "ore," (4) "rock." I think that any person acquainted with Hebrew and Arabic would feel satisfied by M. Clermont-Ganneau's remarkable discovery of Zohemoth.

## VI.

## HOUSE OF THE HOLY GHOST.

It may be necessary to note that the map mentioned by Dr. Chaplin, bearing this name, is a reduction from one made by me in 1883, and the place in question is marked where he showed me the site so called in 1881. I am afraid, however, it does not occur in any mediæval account of the city, as far as my reading goes.

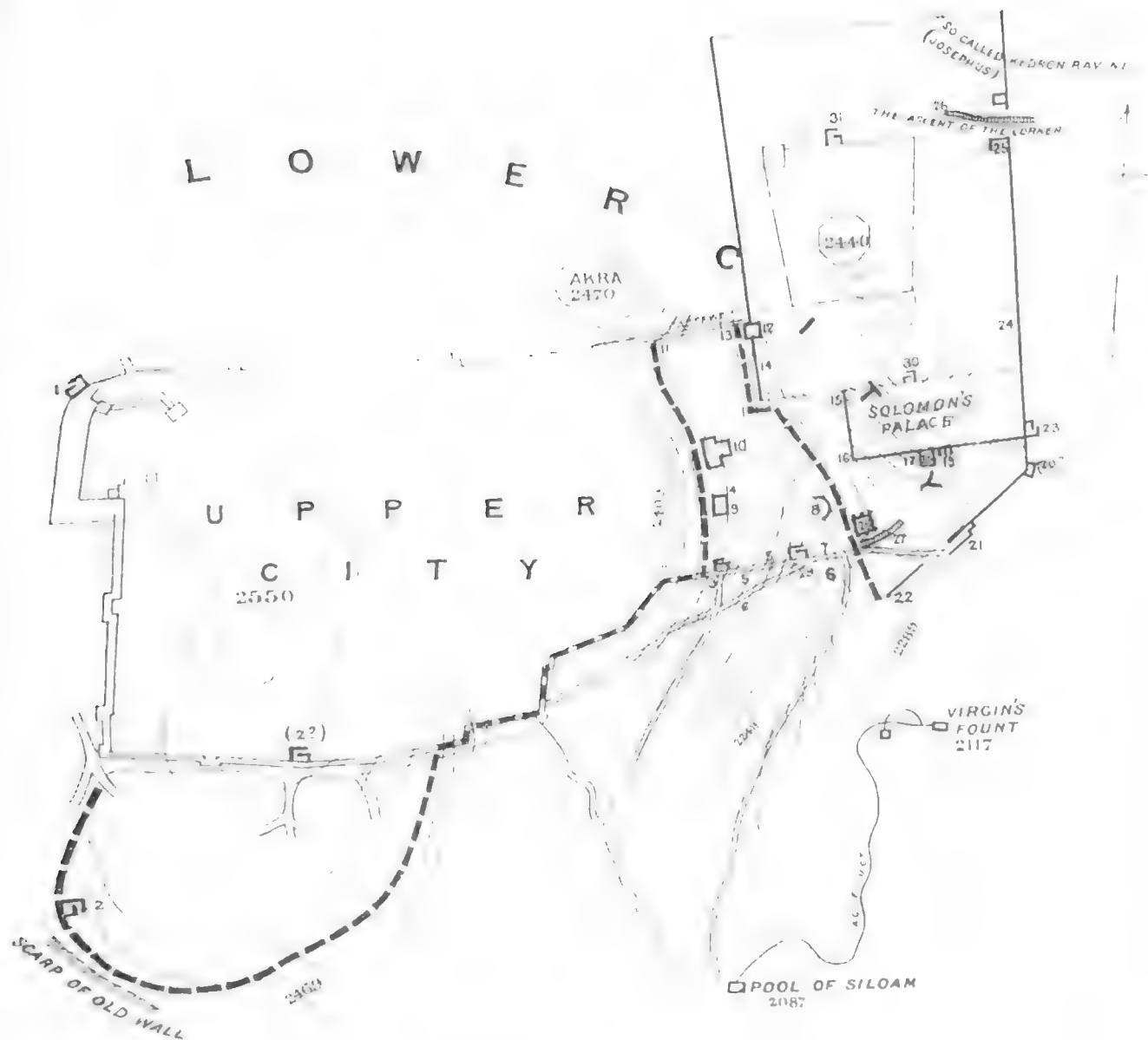
NEHEMIAH'S SOUTH WALL, AND THE LOCALITY OF  
THE ROYAL SEPULCHRES.

As the basis of the accompanying plan, I take the ascertained rock contours, issued with the Memoirs of the Survey, and place upon them, to start with, the outlines of ancient structures ascertained by Sir C. Warren. The modern Zion being the Upper City of Josephus, all the lower hills lying about it, so far as they are built upon, will be the Lower City. Accepting Warren's Akra, the Akra becomes part of the Lower City when the Causeway is built and joins it to the eastern hill,<sup>1</sup> and more thoroughly so when the valley north of the causeway is filled up in the days of Simon Maccabæus. The Lower City would thus lie round about the Upper City in crescent form, and we may agree with those who translate Josephus's *'αμφίκυπτος* in that sense (Bell. v, 4, 1). The valley descending from Herod's Gate and entering the Kedron just north of the Golden Gate, is probably Josephus' "valley called Kedron," possibly the original Upper Kedron before it was filled up. As it was not filled up till Pompey's time, it was still a valley in Old Testament times, and its existence is implied in Nehemiah iii, 31. The sites of walls and buildings adopted from Warren for the purpose of this paper are (1) the Temple

<sup>1</sup> May not this causeway represent Millo? The word means a causeway or an embankment.



# SKETCH PLAN SHEWING NEHEMIAHS SOUTH WALL.



\*\* The contour lines represent successive steps of ten feet. The height at the Triple Gate is 2379 feet.

## REFERENCE.

Suggested line of wall 

- |    |                             |    |  |
|----|-----------------------------|----|--|
| 1  | Valley gate                 | 17 | Turning of the wall                                |
| 2  | Dung gate                   | 18 | Tower at King's house<br>(Tower that standeth out) |
| 3  | Fountain gate               | 19 | Water gate   |
| 4  | King's pool                 | 20 | Tower that lieth out                               |
| 5  | Wall of Pool of Shelah      | 21 | Great tower that lieth out                         |
| 6  | King's gardens              | 22 | Wall of Ophel                                      |
| 7  | Stairs of the City of David | 23 | Horse gate   |
| 8  | Sepulchres of David         | 24 | Houses of priests                                  |
| 9  | The Pool that was made      | 25 | Gate Miphkad                                       |
| 10 | House of the mighty         | 26 | Ascent of the corner                               |
| 11 | Turning of the wall         | 27 | Going up of the wall                               |
| 12 | The Armoury                 | 28 | House of David                                     |
| 13 | Turning of the wall         | 29 | Gate between two walls                             |
| 14 | House of Eliashib           | 30 | Gate of the Guard (2 Kings, xi. 19)                |
| 15 | Turning of the wall         | 31 | Gate of the Guard (Neh. xii. 39)                   |
| 16 | The Corner                  |    |  |



courts, as represented in the plan ; (2) Solomon's palace, south of the Temple, but occupying only two-thirds of the width of the Haram Area ; (3) the wall of Ophel, and its towers, the wall terminating 700 feet from its elbow ; (4) the great causeway, extending westward from Wilson's arch.

The Temple and Palace, as given by Warren, leave a vacant square at the south-western corner of the Haram, where the masonry for 300 feet each way from the corner is different from the rest, and more recent.

With this ascertained nucleus of buildings, and the ascertained contours of hills and valleys, I proceed, first, to trace the south wall of Nehemiah, and afterwards to test its accuracy. Let us bear in mind that Nehemiah repaired only, and did not build *de novo*, so that the lines of wall to be recovered are really older than his time. From the Jaffa Gate we follow the existing line of wall southward, as far as it extends. We might be content to follow it eastward across the ridge of the modern Zion— and might say in defence of that line that later builders found it easier to repair old walls than to build new ones—but the point is not vital to the main contention of this paper, and so the wall may be allowed to go round the brow, and thus take in the rock scarp and the remains of masonry at the south-west shoulder. In either case the wall made a bay up the Tyropean Valley, as Lewin contends ("Sketch of Jerusalem"), and as Josephus plainly declares (*ὑπὲρ τὴν Σιλωάμ*, Bell. v, 4, 2). By following the eastern brow of modern Zion right northward to the causeway, the wall completed the circuit of the Upper City, which, according to Josephus, had a wall of its own, going all round. Where it joined the causeway it would make a right angle or something near it. On the east side a wall making a similar angle with the causeway would run southward. The primary object of this wall would be to defend the Temple and the Palace and other buildings upon Moriah and Ophel ; in other words, the eastern hill, in the first instance, had its own separate defending wall, the same as the western ; and hence the intermediate "suburbs" came at length to be enclosed in the city. The course of this wall would be influenced partly by the contours of the ground, and partly by the outline of buildings existing on the ground. It would ultimately join the wall of Ophel. An objection may be raised to this line of wall as being partly in a valley. But it is only in the valley where the outline of Temple and Palace force it to be so ; and it cannot be said to be useless, since it is, of course, an obstacle to an enemy. Besides, an *a priori* objection to the wall can have but little weight in the face of Nehemiah's descriptions which appear to require its existence, and which become intelligible for the first time when its existence is allowed.

As dwellings, pools, or gardens would sooner or later be made in the intra-mural suburb, a transverse wall would be built east and west across the valley, to protect them, and such a wall would greatly strengthen the city at the same time. For this cross wall the existing line of wall may be followed, in the absence of historical evidence for placing it elsewhere.

This wall is, of course, in a valley, but it must be remembered that both the Upper City and the Lower are protected without it, and it is of some advantage as an additional defence.

With this arrangement, adopted for good reasons already given, the descriptions in Nehemiah can be understood in detail.

#### NEHEMIAH'S NIGHT-RIDE.

In chap. ii, 13, we read—"I went out by the Valley Gate" (this is at or near the Jaffa Gate, the head of the Tyropœan Valley—the *gaia*)—"even before the Dragon Spring and to the Dung Gate." This Dung Gate must be near the south-west corner of the city, to agree with chap. iii, 13. "Then I went on to the Fountain Gate"—a convenient exit from the Upper City for the Fountain of Siloam—"and to the King's Pool (*el-Berekath*)," a pool probably within the enclosed suburb, made by the king, or for the king, and near the king's garden, or the king's house. "But there was no place for the beast that was under me to pass." Why? Because here we have two walls in a narrow space, and the destruction of both of them had filled the valley with *débris*. "Then I went up by the brook (*nachal*, the Kedron) and viewed the wall, and turned, and passed in by the Valley Gate."

#### THE REBUILDING OF THE WALLS AND GATES.

We pass over the repairing of the walls from the Sheep Gate, north of the Temple, to the Valley Gate in the west wall.

In verse 13: From the Valley Gate it is "1,000 cubits on the wall to the Dung Gate." This forbids any identification with the present Dung Gate.

In verse 15: Shallun, who repairs the Fountain Gate, repairs also "the wall of the Pool of Shelah by the king's garden." Allow that Shelah is Siloam, yet this need not be a wall running down to Siloam—those who take that line go wrong all the rest of the way—it is the transverse wall in the same valley above. Through a gate in this wall the Fountain of Siloam would be conveniently reached from the suburb; and this would be the "Gate between two walls," through which Zedekiah fled away (2 Kings, xxv, 4; Jer. xxxix, 4; lii, 7). The wall was *by* the King's garden (*le=by*, or near.) Shallun goes on "unto (*ad*) the Stairs (*maaloth*) that go down from the City of David." So the City of David includes Ophel, and the Stairs descend the Ophel slope westward into the bed of the Tyropœan.

Verse 16: "After him repaired Nehemiah, the son of Azbuk, unto the place over against (*ueged* = in front of) the sepulchres of David." The wall of the Pool of Shelah was an offshoot or side work, so Nehemiah would take up the repairs by the Fountain Gate and work northward. He comes over against the sepulchres, which are therefore on the Ophel side, a little to the north of the Stairs. The entrance would have to be

low down in the valley bed, to be outside the wall which protects Ophel on the west. But why not? Nehemiah continues working northward "unto the pool that was made" (*berekah*, probably the king's pool of ii, 14), "and unto the house of the mighty men." If this is the house of David's body-guard, it will probably be within easy distance of David's house, while yet Nehemiah's description places it on the west side of the Tyropœan; so we may reasonably locate it as in the plan.

In the remaining short space on this side we have no less than four bands of workers, indicating that the destruction had been very great, as indeed Nehemiah found it to be when there was no possibility of his beast getting along; and the next indication of locality is in—

Verse 19, "the turning" of the wall, "over against the ascent to the armoury." The armoury, therefore, was in or near the north-eastern angle of the suburb.

Verse 20: We are now carried from "the turning" of the wall by the armoury, southward, "unto the door of the house of Eliashib, the high priest;" and we are not surprised to find his house here, for we are close alongside the Temple courts. The workers come *unto* the door of Eliashib's house, which thus seems to project westward, so as to be quite near to the line of wall; but they only come *over against* the less important houses which follow.

Verse 24: The sixth worker down this side comes to "the turning" of the wall and "unto the corner." The turning is not the same as the corner; the Hebrew language uses different words for a re-entering and a salient angle. Each of the two turnings at the causeway (vv. 19, 20) is called a *miqtzoa* (= a re-entering angle); but now, in v. 24, they come to a *miqtzoa* and to a *pinuch* (a projecting angle). It is to be observed that we should not have such angles at this part but for the vacant square which Warren's examination of the masonry compelled him to leave—the wall for 300 feet each way from the south-west corner of the Haram being more recent than the rest.

The first salient angle is passed over because the worker who begins north of it continues his labours till he comes south of it, and so its mention is not necessary in defining the work done. (In like manner, in vv. 6–8, the Gate of Ephraim is passed by without mention, although, according to xii, 38, 39, it existed between the Broad Wall and the Old Gate.)

Verse 25: The mention now of another re-entering angle might perplex us, only that the same verse speaks of a "tower standing out from the king's upper house," and this may easily afford the angle.

Verse 26: We are now fairly on the hill of Ophel, and accordingly the workers who have been set to labour here are "the Nethinim dwelling in Ophel." There is also mention in v. 31 of a house of the Nethinim near the northern end of the east wall—still outside the Temple precincts.<sup>1</sup>

<sup>1</sup>The Nethinim were but servants of the Levites.

As soon as the Nethinim of Ophel get far enough south to look beyond the projecting tower just mentioned and see the Triple Gate, they are stated to be over against the Water Gate. At the same time they are over against the tower that standeth out. This is not necessarily the tower mentioned in the previous verse, as projecting from the king's house, but may, perhaps, be the one at the south-east angle of the Ophel wall, discovered by Warren.

Verse 27 : Where the Nethinim lay down their work it is taken up by the Tekoites, who presently come "over against the great tower that standeth out," namely, the large tower which Warren found. It is now not far to complete the junction with the Ophel wall, at the point where Warren found that wall to end abruptly ; and Nehemiah tells us that the Tekoites actually did this.

Verse 28 : The Ophel wall, being in good repair, is no more referred to ; and the next thing mentioned is the Horse Gate. As Warren could not find any gate in the Ophel wall, the Horse Gate must have been north of it ; and here it would be at a point convenient for entrance to Solomon's stables, which would, perhaps, be *under* the present vaults known by that name.

"Above the Horse Gate repaired the priests, every one over against his own house." These houses of priests are in a position exactly corresponding with the houses of Eliashib and others on the west side. The expression, "over against," implies that the city wall, which is being repaired, stands removed from the priests' houses, from the Temple courts, and it would be eastward of the present Haram wall. Herr Conrad Schick draws it so. I don't know his view about it, but it may possibly be the wall of Manasseh.

Verse 29 : An East Gate is referred to (*Mizrach*), not to be co-founded with the gate *Harsith*, the so-called east gate of Jer. xix, 2, in the Authorised Version.

When we come over against the Golden Gate—which Nehemiah calls the Gate Miphkad—we are just where Warren's tunnelling work was arrested by a massive masonry barrier—probably a part of the ancient city wall, 50 feet east of the Haram wall. Immediately we are at "the ascent of the corner." There is no corner now immediately north of the Golden Gate, and no ascent from a depth ; but it was just here that Warren discovered the deepest valley of all, and the wall buried 125 feet, so that we obtain just what we want. The stairs or steps would be cut in the rock, and it is not unlikely that they may yet be found.

#### THE ROUTE OF THE PROCESSIONISTS.

Chapter xii affords striking confirmation of the foregoing positions. At the dedication of the walls two companies start from the Valley Gate, and go opposite ways to meet in the Temple. Presumably the Valley

Gate was chosen to afford journeys of about equal length ; and this is another indication that the wall did not go down to Siloam. The party going south pass the Dung Gate, and reach the Fountain Gate. And now which way will they go ? The wall has been repaired right ahead of them, and also the wall turning north, and they will have to choose between two routes. The Revised Version says they went "by (*ad*) the Fountain Gate and straight before them," and ascended *by* the Stairs of the City of David *at* the going up of the wall (not *by* this time, nor really "at," but *in*—*ba-maaleth le-chomah*, i.e., *in* the stairway of the wall *by* the Stairs of David—a different flight of stairs from the Stairs of the City of David, which descended into the valley bed).

Their way up these stairs and beyond carried them "above the house of David, even unto the Water Gate." The house of David here is close by the king's garden of iii, 15 ; and its position on the slope of the hill suggests a reason for calling Solomon's palace the king's upper house (or high house, iii, 25). Some say "the house of David" means David's tomb ; but if that be so, it only confirms the position which I am led to assign to the tomb. Observe also that the position required for the Water Gate here is again that of the present Triple Gate, the same as in iii, 26.

It deserves particular attention that the processionists pass quickly from the Stairs of David to the Water Gate, whereas in the re-building these two places are very wide apart, because the bend of the wall is followed. In iii, 15, we have the Sepulchres, the Pool, the House of the Mighty, four more bands of workers, the turning of the wall, the armoury, the house of Eliashib, the turning, the corner, and the outstanding tower—all between the point over against the Stairs of David and the Water Gate ; but none of these things come in the route of the processionists. This is easy to understand if the wall makes a bay up the Tyropœan, for then the short cut in the text corresponds with the short cut in the plan ; but it can hardly be made intelligible on any plan which omits this bay and carries the wall down to Siloam.

A superficial objection may be raised that the detour up the valley and *viâ* the causeway, avoided by the processionists, would be avoided by Nehemiah in repairing the walls, for why should he do more than repair the short transverse wall, when his object was speed ? My reply would be that his object was strength and safety as well as speed. The transverse wall was no sufficient protection by itself, there being an easy approach up the valley, but it was valuable as an addition to the inner walls. Besides, Nehemiah had workers enough to be engaged at all parts at once, so that the completion of the work was not at all delayed by repairing the two north-and-south walls of the bend simultaneously with the cross wall, and indeed with the walls all round the city.

The line of wall being established as above, with the positions of David's House, the gate between two walls, &c., the accuracy of the restoration

may be tested by reading many incidents of the history in the light of it. The chief importance of the restoration lies in the support it gives to the view that the City of David included the Ophel hill, and in the indications afforded of the position of the Sepulchres, the "Gate between two walls," &c.

#### INCIDENTS OF THE HISTORY.

*Taking of Jerusalem by David.*—If the walls on Ophel are to stand as above, the question arises whether the Rev. W. F. Birch's ingenious suggestion can be supported, that Joab, by ascending the shafts from the Virgin's Fountain, effected an entrance into the city? Apparently not so, unless a continuation of this series of passages remains to be discovered—which may be the case. On the other hand, David's camp would be near the Virgin's Fount, and his attack would be made on this side; for the above reading of Nehemiah favours the idea that the Zion or Lower City which he first captured was on the Ophel hill. David took the lower city by force, captured the akra afterwards, and joined them together to be one body—perhaps by the building of Millo, the causeway (Josephus, Ant. vii, 3, 1).

*David's flight and exile; the Spies.*—David's house was on Ophel. This is indicated by the references in Nehemiah, and agrees also with such passages as 1 Kings viii, 1-6, where the ark is *brought up* out of the City of David into the Temple (and 2 Sam. xxiv, 18; 1 Kings ix, 24). When David decided to flee because of the rebellion of Absalom, he would go down the Stairs of the City of David and pass out by the gate between two walls; and then, as we are told, he passed over the Kedron, ascended Olivet, and went down towards Jericho to cross the Jordan.

But he left friends behind him at the palace, and it was arranged that two sons of the priests should act as spies and bring him news (2 Sam. xvii). They waited outside the city, at En-Rogel, and a wench went and told them. If we might assume, with so many, that En-Rogel is the Virgin's Fountain, and might retain the supposition referred to above, that the rock-cut passages from the Fount could be entered from within the city, it would be natural to suppose that the spies descended the steps into the pool, and, when the lowness of the water allowed, passed beyond the pool into the passage, while the maid servant descended the staircases from within the city, taking a bucket to draw water, and so escaping suspicion. The spies then hied away to David with the information. The fact that En-Rogel was chosen as the hiding-place accords well with the view that David's house was on Ophel; for the news would come from the palace, and En-Rogel was certainly somewhere south or south-east of the city.

*The death of Athaliah.*—This incident affords some indications of locality, in beautiful agreement with Nehemiah. When this Queen-mother



heard that her son, the King, had been killed by Jehu, she snatched at the sovereignty for herself, and her policy was to slay all the seed royal. But one little child escaped, carried off by its nurse, and they were secreted in the Temple by Jehoiada, the High Priest. In the seventh year Jehoiada assembled the chiefs of the people in the Temple, produced the little child Joash, stood him upon the platform appropriated to the kings, and said, This is the rightful heir! The chiefs shouted their joy, when Athaliah heard the noise and rushed into the Temple to learn the cause. That she should hear so readily and find such easy access to the Temple, accords well with the supposition that she was living in Solomon's palace, close adjoining the Temple, as Warren places it. When Athaliah saw the state of things she cried,—“Treason, treason!” But she found no friends there. The priest said, “‘Have her forth—slay her not in the house of the Lord!’ So they made way for her; and she went to the entry of the Horse Gate to the King's house; and they slew her there” (2 Chron. xviii, 15; 2 Kings xii, 16). It is implied in this narrative that the Horse Gate was not only by the king's house, but that it was also the nearest point which could be considered fairly beyond the sacred precincts; and this is in full agreement with the position which we have assigned it.

In the context of the passages just quoted we find that Joash is carried “by the way of the gate of the guard into the king's house.” This gate must, of course, have been on that side of the palace adjoining the Temple courts; it was probably due north of the Water Gate (*i.e.*, the Triple Gate), and it thus again accords with Neh. iii, 25, where the tower standing out from Solomon's house is said to be “by the court of the guard.” The court of the guard may very well have extended from the Water Gate without to the Gate of the Guard on the Temple side of the palace. From Neh. xii, 39, it appears that there was a corresponding Gate of the Guard at the corresponding point on the north side of the altar.

*The assassination of Joash.*—When Joash grew to man's estate he made changes which displeased his people; and the short statement is that the conspirators slew him “on his bed,” “at the house of Millo that goeth down to Silla” (2 Kings xii, 20, combined with 2 Chron. xxiv, 25). This is somewhat obscure. Fuerst says that Silla is the present David Street, a highway steeply descending. So far as appears it may just as well be any other descending path; and I fancy it was the “stairway of the wall” of Neh. xii, 37, close by the Stairs of the City of David, and close to the house of David. Joash was slain while going down Silla, not while going down *to* Silla, for there is no preposition here in the Hebrew text. We may suppose that he was living in David's house, and when he heard of the conspiracy he designed to flee down the Stairs and through the gate between two walls; but being a sick man he was being carried on a litter, as Lewin remarks; and on this particular stairway, I imagine the assassins fell upon him.

Why David's house should be called the house of Millo is the next question, and I can only offer a suggestion. Millo was at first the northern boundary of the roughly-quadrangular "suburb," but it would, perhaps, in course of time, give its name to the whole of the enclosed space, or the whole of the four walls; and then, because David's house adjoined the eastern wall of the four, it was called the house of Millo. After Solomon had built a grander "king's house," there might be a reason for finding some other term for the house in which David had dwelt.

*The flight of Zedekiah.*—Not to multiply incidents, let us come now to the last King of Judah—Zedekiah. In his day Nebuchadnezzar came up against the city; and when, by a night surprise, he effected an entrance at the middle gate of the north wall, Zedekiah took alarm and fled away at once with his bodyguard. Whether living in Solomon's house or in David's, his way would be down the Stairs of the City of David into the bed of the Tyropean; and then we are distinctly told that he fled by the way of the king's garden, by the gate betwixt the two walls (2 Kings xxv, 4; Jer. xxxix, 4; lii, 7). His plan was to take the route which David had taken when he fled from Absalom.

*Jeremiah's prophecy.*—In order to encourage the people during the captivity, Jeremiah predicts that Jerusalem shall be again inhabited and its borders extended. The measuring line is to go forth over against it upon the hill Gareb (east or north of the Temple), and shall compass about to Goath (this seems to be a sweep round the north-western, western, and south-western parts of the city); and the whole valley of the dead bodies and of the ashes (= Topheth, the broad junction of the present Hinnom and Tyropean valleys), and all the fields (eastward) unto the Brook Kedron (and then northward), unto the corner of the Horse Gate toward the east shall be holy unto the Lord (Jer. xxxi, 38). This reference again confirms the position we have assigned to the Horse Gate.

Zechariah also describes Jerusalem in its length and breadth. It is to be lifted up and inhabited "from Benjamin's Gate (which would seem to be a Temple gate having a north-east position), unto the place of the first gate<sup>1</sup> (the first gate of the city, north-east, but not so much east as the Benjamin Gate of the Temple), unto the Corner Gate (which was at the north-west corner of the city, but is passed over in Neh. iii, because it needs no repair. But see a reference to it in 2 Kings xiv, 13; 2 Chron. xxv, 13). The north and south extremes named by Zechariah are the Tower of Hananel (same position as Antonia) and the king's wine-presses (in the neighbourhood of the king's garden, which we have already seen was near to the gate between two walls).

<sup>1</sup> As the Hebrew language reads from right to left, so when the gates are numbered, the counting takes the same direction, as does also Nehemiah's description of the repair of the gates and walls.

## THE "BROAD WALL" AT JERUSALEM.

WAS the Broad Wall (of Neh. iii, 8, and xii, 38) broad in its own dimensions, or so named for some other reason? It may seem to be only an academical question, but it is really of some importance in our endeavour to restore the plan of the ancient city. Lewin, in his "Sketch of Jerusalem," seeks to identify a certain piece of old wall with the Broad Wall of Scripture, because the piece is a good many feet in thickness (p. 48). But if the Broad Wall was so named for some other reason, this identification fails; and if the true reference of the name can be discovered, it may be a guide to the actual position of the Broad Wall.

The Hebrew words are *chomah rêchâbâh*. *Râchâb*, with its cognate forms *râchâb*, *rechôb*, &c., convey chiefly the idea of roomy space. In Job xxxvi, 16, we have "Yea, he would have led thee away out of distress into a broad place, where there is no straitness." In Gen. xix, 2, the two angels say to Lot, "We will abide in the street all night," where "street" is the rendering of *rechob*. We have *rechob* again in Neh. viii, 1, "And all the people gathered themselves together as one man into the broad place that was before the Water Gate," as a congregation for Ezra to address. This open space appears to me to have been on the hill of Ophel, south of the Triple Gate. The broad place of Ezra x, 9, may have been the same. Thus the word seems to be used in much the same way as we use the word Square or Platz. We come still nearer to it in the Broad Sanctuary at Westminster.

Now, besides "the Broad" before the Water Gate, there was another Broad in Jerusalem, in which the excited people were assembled discussing the approach of Sennacherib, when Hezekiah went to them and spake comfortably to them (2 Chron. xxxii, 6). This broad place is not said to be before the Water Gate, but at the Gate of the City; and the circumstances favour the idea that it was at the Valley Gate (Jaffa Gate), or some gate of the north-western quarter, seeing that Sennacherib made his approach from the north-west.

The references in Nehemiah require that the Broad Wall should be in this quarter. May it not signify, therefore, the wall by the Broad?

## TWIN SACRED MOUNTS AT JERUSALEM.

IN a paper on Kirjath Sepher, in the *Quarterly Statement* for October, 1888, speaking of the two Sipparas—at Abu Hubba and Agadé, on the two sides of a stream—I remarked, "I find reason to think that the duality was symbolical, and was important in the astro-religious system, the two sites standing for the two equinoxes." I said that we might compare with these twin temples or towers the mound of Birs Nimroud

and the Babil mound, in near proximity but on opposite sides of the Euphrates. I would add now, that it may be instructive to compare the summit of Moriah and the knoll of the traditional Calvary covered by the Church of the Holy Sepulchre.

These two mounts at Jerusalem were probably sacred before the Israelitish occupation, and we need not be surprised if some of the traditions which relate to them prove to have come down from heathen sources. The parallel with the sacred mounts of other nations is indicated by the following circumstances :—

The mount was made the site of a temple : on the mount at Borsippa the Temple of Nebo ; at Sippara the Temple of Shamas, the sun-god ; at Moriah (eventually) the Temple of Jehovah.

The temple often was over a well. Mariette describes the pyramid (which was an artificial mount) built of enormous stones *covering the well* as with a massive lid. In the Birs-Nimroud inscription, Nebuchadnezzar says that, when he finished building the Tower of the Seven Planets at Borsippa, which former kings had begun, he found that the water-springs beneath it had not been kept in order.<sup>1</sup> Under the Dome of the Rock at Jerusalem we know there is the sacred and mysterious well—the “well of souls.”

The rock or mount was spoken of as a foundation stone of the universe. Nebo is called “the bond of the universe,” and his temple at Borsippa was “the house of the seven bonds of heaven and earth.” The sun-god of Sippara comes forth from the foundation of the sky.<sup>2</sup> In the temple enclosure of Bel-Merodach was a tower of eight stages, called the house of the foundation stone of heaven and earth. It is pointed out by Lewin (“Sketch of Jerusalem,” 15), that the Temple of Solomon stood on the summit of a series of successive terraces, fashioned in imitation of the Assyrian style of architecture, and we know that in Mohammedan tradition the sacred rock of Moriah is “the foundation stone of the world.” Compare also the Scripture expressions, “The mountain of the house,” “Behold I lay in Zion a foundation stone,” “Our Rock is not as their rock,” “Upon this rock I will build my church” in place of the temple which occupies the rock at present.<sup>3</sup>

The rock at Borsippa was the symbol of the equinox, as I am led to think. The temple of Nebo was built upon the rock to set forth that the astro-religious system was built upon the equinox as its foundation and starting point. I have collected ample evidence of this, but it is not necessary here to elaborate it.

The system dates from the time when the equinoxes were astronomically connected with the constellations *Taurus* and *Scorpio*, which are of course half a circle apart in the zodiac, as the equinox dates are half a

<sup>1</sup> Mariette, “Mon. Upper Egypt,” p. 73, Eng. trans. Gerald Massey, “Natural Genesis,” ii, 192.

<sup>2</sup> Sayce, “Hibbert Lectures,” 96, 115, 174.

<sup>3</sup> This is a new interpretation of the passage ; but I can substantiate it.

year apart in the calendar. The spring equinox was in the Bull, the autumn equinox in the Scorpion, and the spring equinox as the beginning of the year, and of the cycle, was the foundation. Of course, then, autumn and the Scorpion were opposite the foundation, and almost as important as the foundation itself. Accordingly, in the Accadian year (whence was derived the Assyrian) the month which corresponded to the Semitic Tasrit or Tisri, and our September was called "the month of the illustrious mound;"<sup>1</sup> and the sign Scorpio is said to face the foundation. In the *Proceedings Soc. Bib. Arch.*, Feb. 5th, 1889, Mr. Brown has the following:—"The Akkadian name of the eighth month is connected with 'Foundation,' and Professor Sayce remarks, 'M. Ernest de Bunsen has shown that Scorpio was taken as the starting point of the primitive calendar ('Transactions,' iii, 163); but the name may mean 'Opposite to the Foundation' *vide* Sayce, 'The Babylonian Astronomy,' in 'Monthly Notices' of the Royal Astronomical Society, xi, 3, p. 117), *i.e.*, to the second month and the Bull, as (at one time) Leader of the Signs."

The mounts and temples were connected with oracles and writings. Nebo is called the divine scribe, the author of the oracle, the creator of the written tablet.<sup>2</sup> The royal library at Nineveh stood within the precincts of the Temple of Nineveh. At Sippara, in the temple of the sun god Mr. Rassam has found thousands of written tablets, besides a great work on astronomy and astrology. In the temple on Mount Moriah were enshrined the ark of the covenant and the Books of the Law. There is even a tradition that these are hidden in the sacred "well of souls."

The mounts and the writings were more or less connected with traditions of the Deluge. Xisuthros, the Chaldean Noah, was the author of writings concerning the antediluvian world, which he buried at Sippara. The Tower of Babel was to have its head above the reach of any future deluge. A story is sometimes told at Jerusalem that the Mount Calvary was called Golgotha, the place of a skull, or the skull-hill, because the skull of Adam was washed up there by the Deluge.

The little mount covered by the Church of the Holy Sepulchre stands by Moriah as a twin sacred mount, not only in natural position, but as a nucleus of similar traditions. Tradition says that Adam is buried there and that Christ was to be buried there, so that the second Adam might be with the first. The twin mounts are diametrically opposed: Adam being buried at Golgotha, Mohammed rises from the Sakhrâh into heaven death and resurrection are symbolically connected with the two mounts. In the *Quarterly Statement*, October, 1888, Mr. Simpson gives us Herr Schick's careful drawings of the particular object which marks, in the Greek Church of the Holy Sepulchre, the Middle of the World, and refers

<sup>1</sup> Sayce, "Hibbert Lectures," 406.

<sup>2</sup> Sayce, 9, 114.

to the legend of Adam's burial there. That the Mohammedans should place Adam and the Middle of the World at Mecca, and not at Jerusalem, is only natural ; for representative or symbolical mounts were adopted or reared in many places. The Greek navel of the world was at Delphi, for the like astronomical reason.

Now, if there is any ground for the parallel I have suggested, it may be worth inquiry, what bearing these facts have upon the question of the true site of Calvary. It is clear that the mount which the legends couple with Moriah is that over which the Church of the Holy Sepulchre stands, and not the one at the Grotto of Jeremiah. On the other hand, the immemorial sanctity of the site would hardly be a reason for making it a place for executions, unless to desecrate it, though it might very well be a reason for building temples or churches over it.

GEORGE ST. CLAIR.

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ERRATA.

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1889. Page 38, line 7. *Omit as.*  
 „ 41, „ 7. *After as read if.*  
 „ 46, „ 18. *Omit present.*  
 „ 46, „ 23. *For in read into.*  
 „ 46, „ 24. *Before were read both.*  
 „ 46, „ 28. *Omit marked.*  
 „ 50, „ 18. *Before nine read of.*
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THE  
PALESTINE EXPLORATION FUND.

NOTES AND NEWS.

With this number is issued an account of the Survey of Tell 'Ábil, the "Abila of the Decapolis," by Herr Schumacher; it is printed with large margins, and may be bound up with the Quarterly Statement, or with "Pella." The price of this number to the general public is 3s. 6d.

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Herr Schick has forwarded an elaborate description of the Mount of Olives, together with a report of alterations and excavations recently made there. He mentions that on that part of the Mount called by the Arabs *Kurm es Saiad*, and by the Christians *Tiri Galilæ*, which has for some years been in possession of the Greek Church, an ancient Christian cemetery has been discovered, containing three rows of well built masonry tombs. Not far from the same spot an extensive series of catacombs has been opened, which the Greek Bishop Epiphanius, thinks may be the "peristereon" mentioned by Josephus in describing the wall of circumvallation erected by the Romans during the siege. Some of these tombs were apparently of Jewish origin, afterwards altered and used by the Christians, who added greatly to their number. Herr Schick remarks the frequency with which the *loculi* are found in groups of three, and that there is no uniformity as to their direction. Many crosses were found cut in the rock, but if there were ever any inscriptions they have been defaced. He also notes several small pools or tanks in the midst of these tombs, which he regards as being intended to collect the water coming into the cavern during the rainy season, in order that the *loculi* and the pathway might be kept dry. Many objects of interest were found during the excavations, as a mosaic slab with Greek inscription, Jewish and Greek coins, more than forty Roman tiles bearing a stamp which Herr Schick thinks is that of the Tenth Legion, a number of jars and vases in glass and earthenware, and an iron spear head.

Her Schiek also reports the discovery of an ancient church opposite the barracks in the Tarik Bab Sitti Maryam. West of the Chapel of the Flagellation there had for many years been a waste place, containing *débris* covering ruins, and walled up on the side next the street. The Franciscans have recently removed this accumulation of rubbish, and laid bare the walls of a small church and some buildings adjoining it erected round a small courtyard, having the rock for its flooring. The walls of the church are 5 feet or more high. At the eastern end are three apses, in the northern of which an altar is still preserved. The flooring consists of large hard polished stones. It is curious that the south-western corner of the building rests on the eastern of the twin pools, and that a cistern was erected there at a later period.

A report of further discoveries in Galilee has been received from Herr Schumacher. Some workmen were chasing a hare on the road between Haifa and Nazareth, when the animal disappeared into a small opening hidden by a bush. This opening was found to lead into a sepulchral chamber excavated in the rock, and having four *kokim*, containing four sarcophagi of pottery ware, resembling that found at 'Abellin, and described by the late Mr. Lawrence Oliphant in *Quarterly Statement*, 1886, page 80. Mr. Schumacher has examined the caves discovered some time ago at Shefa 'Amr, which are now converted into cisterns, and sends a drawing of the very curious ornamentation over the entrance and on each side of the rock-cut vestibule. He has also visited and examined the famous cave of Jessâs, which, after being nearly forgotten by the Bedawîn and Fellahin of the district, was re-discovered last winter. He found in it a large number of human skulls and other bones. A second cave was also shown to him in which he found human skulls.

The "Answers" to the "Questions" are now beginning to yield results. On p. 120 will be found a report by Major Conder on the first batch received.

The present number contains an important report and plans of the large cistern recently discovered near the Church of the Holy Sepulchre. The cistern has 18 piers, and measures 102 feet long by 31 feet broad (*see* page 111). Some additional notes with sections will be published in the next number.

It is curious to note that the situation of this immense cistern is nearly the same as that of the church of St. Marie Latine, as shown on Plate VIII. of Count de Vogue's "*Les Eglises de la Terre Sainte*."

Mr. Guy le Strange's long-expected work on the descriptions of Palestine left us by the mediæval Arab geographers and travellers, will be published in the autumn. The book will be called "*Palestine under the Moslems*." Four



years have been spent in gathering together the materials, and translating (from the Arabic and Persian) the various Moslem accounts of Palestine, which, beginning in the middle of the ninth century, reach in unbroken succession down to the close of the fifteenth century of our era. It is expected that the work will prove one of lasting interest; and it should be noted that nothing of the kind has ever hitherto been attempted by any other Orientalist.

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After a general description of the physical features of Syria and Palestine, as noted by the early Moslem writers, followed by an account of the products and commerce of the country in the middle ages, the next succeeding chapters will be devoted to Jerusalem. The many detailed descriptions of the great Aksâ Mosque, and of the Dome of the Rock, prior to the first Crusade, will be given, translated, *in extenso*. The various points raised are next discussed, the descriptions being illustrated by plans of the various buildings, at the different epochs, expressly drawn for the present publication. Next, the history of the many other buildings in the Haram Area will be noticed, and the question of the ancient Gates as much as possible elucidated. Several plans of the Haram Area at the different epochs will help to render these descriptions clear to those who have not visited Jerusalem. In this section of the work a mass of evidence derived from contemporary authorities has now been brought together (nearly the whole of which is taken from texts that have never before been translated into any European language), proving conclusively that the Dome of the Rock was built by the Arabs, and was not a Christian edifice perverted by the Moslems from its original purpose. The late Mr. Fergusson's celebrated theory, therefore, that the Dome of the Rock is the original Church of the Holy Sepulchre, falls to the ground. In the later chapters on Jerusalem the Arab descriptions of the Church of the Holy Sepulchre, the accounts of the descent of the so-called Holy Fire, with notices of many of the other holy places of Jerusalem, found in the works of Moslem writers, will be brought together and discussed.

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Damascus and the glories of the Great Mosque (before Timour burnt it to the ground) will form the subject of the succeeding chapter, which will contain the description of the city of the Omayyad Caliphs, given in the diaries of Arab and Persian pilgrims. Next will follow the descriptions of the other great provincial towns of Palestine and Syria, such as Ramleh, Hebron (with translations of the various accounts of visits to the Cave of Machpelah), Acre, Tyre, Sidon, Tiberias, Aleppo, Antioch, and other cities of Northern Syria. In a separate chapter there will be brought together certain curious legends and marvellous accounts of caves, "menhirs," temples and wondrous sights, including descriptions of the Seven Sleepers and their Cave, said to have been visited by many of the early Moslem travellers. The second part of the work will contain, arranged in alphabetical order, all the notices of the minor towns, villages, and places in Palestine and Syria mentioned by the Arab geographers and historians. A full index giving the Arabic transcription of all the names will be a necessary adjunct; the Arabic form of the place-names being often of great importance in the identification of Biblical (Hebrew) sites.

The delay in bringing out the work has been caused by the great quantity of translations from the original Arabic (and Persian) authorities needed in order to set before the reader the descriptions, various as to authors and epochs, left by the Moslem conquerors of the Holy Land. All the translations given have been made, at first hand, by Mr. le Strange, from the original Oriental texts. The work, it is hoped, will prove a mine of information rendered available to those who are unacquainted with Eastern Languages, while those whose knowledge allows them to refer to the originals may verify each statement and the words of the translations, for special care is taken in every case to give the reference to the original authority. The Bible and the Early Christian (Roman and Byzantine) writers give the history of the sites in the Holy Land down to the seventh century, A.D., when the Arabs conquered Syria. The present work completes the Biblical, Classical, and Early Christian accounts, and brings the history of the Holy Places down to the present day. Those who have visited Palestine, or know the country from the works of modern travellers, will be interested to compare their recollections with the descriptions left by the mediæval Arabs, and the reading of the Crusading Chronicles will gain, in many details, by a reference to the Moslem writers, who were the contemporaries of Saladin and Richard Cœur de Lion.

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The first volume of the "Survey of Eastern Palestine," by Major Conder, is now ready and being issued to subscribers. It is accompanied by a map of the portion of country surveyed, special plans, and upwards of 350 drawings of ruins, tombs, dolmens, stone circles, inscriptions, &c. The edition is limited to 500. The first 250 subscribers pay seven guineas for the three volumes, with an index; subscribers to the "Survey of Western Palestine" are privileged to have the volumes for this sum. The price will be raised, after 250 names are received, to twelve guineas. The Committee are pledged never to let any copies be subscribed under the sum of seven guineas. Mr. A. P. Watt, 2, Paternoster Square, is the Sole Agent. The attention of intending subscribers is directed to the announcement on the inside of the cover of this number.

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The books now contained in the Society's publications comprise an amount of information on Palestine, and on the researches conducted in the country, which can be found in no other publications. It must never be forgotten that no single traveller, however well equipped by previous knowledge, can compete with a scientific body of explorers, instructed in the periods required, and provided with all the instruments necessary for carrying out their work. The books are the following (*the whole set can be obtained by application to Mr. George Armstrong, for 37s. 6d., carriage paid*):—

By Major Conder, R.E.—

- (1) "Tent Work in Palestine."—A popular account of the survey of Western Palestine, freely illustrated by drawings made by the author himself. This is not a dry record of the sepulchres, or a descriptive catalogue of ruins, springs, and valleys, but a continuous narrative full of observations upon the manners and customs of the people, the Biblical associations of the sites, the Holy City and its memories, and is based upon a six years' experience in the country itself. No other modern traveller has enjoyed the same advantages as Major Conder, or has used his opportunities to better purpose.
- (2) "Heth and Moab."—Under this title Major Conder provides a narrative, as bright and as full of interest as "Tent Work," of the expedition for the *Survey of Eastern Palestine*. How the party began by a flying visit to North Syria, in order to discover the Holy City—Kadesh—of the children of Heth; how they fared across the Jordan, and what discoveries they made there, will be found in this volume.
- (3) Major Conder's "Syrian Stone Lore." This volume, the least known of Major Conder's works, is, perhaps, the most valuable. It attempts a task never before approached—the reconstruction of Palestine from its monuments. It shows what we should know of Syria if there were no Bible, and it illustrates the Bible from the monuments.
- (4) Major Conder's "Altaic Inscriptions." This book is an attempt to read the Hittite Inscriptions. The author has seen no reason to change his views since the publication of the work.
- (5) Professor Hull's "Mount Seir." This is a popular account of the Geological Expedition conducted by Professor Hull for the Committee of the Palestine Fund. The part which deals with the Valley of Arabah will be found entirely new and interesting.
- (6) Herr Schumacher's "Across the Jordan."
- (7) Herr Schumacher's "Jaulân."—These two books must be taken in continuation of Major Conder's works issued as instalments of the unpublished "Survey of Eastern Palestine." They are full of drawings, sketches, and plans, and contain many valuable remarks upon manners and customs.
- (8) The Memoirs of Twenty-one Years' Work.—A copy of this book is presented to every subscriber to the Fund who applies for it. The work is a popular account of the researches conducted by the Society during the past twenty-one years of its existence. It will be found not only valuable in itself as an interesting work, but also as a book of reference, and especially useful in order to show what has been doing, and is still doing, by this Society.
- (9) Herr Schumacher's Kh. Fahil. The ancient Pella, the first retreat of the Christians; with map and illustrations.

- (10) Names and Places in the Old and New Testament and Apocrypha, with their modern identifications, with reference to Josephus, the Memoirs, and *Quarterly Statements*.
- (11) Besant and Palmer's "History of Jerusalem," already described.
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The Committee have added to their list of publications the new edition of the "History of Jerusalem," by Walter Besant and E. H. Palmer (Bentley & Son). It can be obtained by subscribers, carriage paid, for 5s. 6d., by application to the Head Office only. The "History of Jerusalem," which was originally published in 1871, and has long been completely out of print, covers a period and is compiled from materials not included in any other work, though some of the contents have been plundered by later works on the same subject. It begins with the siege by Titus and continues to the fourteenth century, including the Early Christian period, the Moslem invasion, the Mediaeval pilgrims, the Mohammedan pilgrims, the Crusades, the Latin Kingdom, the victorious career of Saladin, the Crusade of Children, and many other little-known episodes in the history of the city and the country.

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The publications for the year 1889, besides those already mentioned, include Schumacher's "Abila" and his "Southern Ajlûn." The former is appended to the present number of the *Quarterly Statement*.

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Mr. Harper's important work on the Illustrations of the Bible obtained from modern researches and observation, is also in the printer's hands, and will be out in the autumn. Its contents, &c., will be duly announced.

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Branch Associations of the Bible Society, all Sunday Schools in union with the Sunday School Institute, the Sunday School Union, and the Wesleyan Sunday School Institute, will please observe that by a special Resolution of the Committee they will henceforth be treated as subscribers and be allowed to purchase the books and maps (by application only to the Secretary) at reduced price.

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The friends of the Society are earnestly requested to use the "Memoirs of Twenty-one Years' Work" as a means of showing what the work has been, and what remains to be done.

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The income of the Society, from March 21st to June 17th, inclusive, was— from subscriptions and donations, 299*l.* 0*s.* 11*d.* ; from all sources, 523*l.* 1*s.* 10*d.* The expenditure during the same period was 427*l.* 16*s.* 10*d.* On June 17th the balance in the Bank was 362*l.* 11*s.* 11*d.*

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It does not seem generally known that cases for binding the *Quarterly Statement* can be had by subscribers on application to the office.

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Subscribers are begged to note that the following : —

1. Index to the *Quarterly Statement*, 1869–1880 ;
2. Cases for Herr Schumacher's "Jaulân ;"
3. Cases for the *Quarterly Statement*, in green or chocolate—

Can be had by application to the office at 1*s.* each.

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Early numbers of the *Quarterly Statement* are very rare. In order to make up complete sets the Committee will be very glad to receive any of the following numbers :—

No. II, 1869 ; No. VII, 1870 ; No. III (July) 1871 ; January and April, 1872 ; January, 1883, and January, 1886.

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It has come to the knowledge of the Committee that certain book hawkers are representing themselves as agents of the Society. The Committee have to caution subscribers that they have no book hawkers in their employ, and that none of their works are sold by any itinerant agents.

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While desiring to give every publicity to proposed identifications and other theories advanced by officers of the Fund and contributors to the pages of the *Quarterly Statement*, the Committee wish it to be distinctly understood that by publishing them in the *Quarterly Statement* they neither sanction nor adopt them.

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As many inquiries have been made about transparent slides, a selection will be made from the photographs of the Society for this purpose. Subscribers wishing to have any are requested to communicate with the Assistant Secretary.

Subscribers who do not receive the *Quarterly Statement* regularly are asked to send a note to the Secretary. Great care is taken to forward each number to all who are entitled to receive it, but changes of address and other causes give rise occasionally to omissions.

The only authorised lecturers for the Society are—

- (1) Mr. George St. Clair, F.G.S., Member of the Anthropological Institute and of the Society of Biblical Archaeology.

His subjects are :—

- (1) *The General Exploration of Palestine.*
- (2) *Jerusalem Buried and Recovered.*
- (3) *Buried Cities, Egypt and Palestine.*
- (4) *Buried Cities of Mesopotamia*, with some account of the Hittites.
- (5) *The Moabite Stone and the Pedigree of the English Alphabet.*

Address : Geo. St. Clair, Bristol Road, Birmingham, or at the Office of the Fund.

- (2) The Rev. Henry Geary, Vicar of St. Thomas's, Portman Square. His lectures are on the following subjects, and all illustrated by original photographs shown as "dissolving views :"—

*The Survey of Western Palestine, as illustrating Bible History.*  
*Palestine East of the Jordan.*  
*The Jerusalem Excavations.*  
*A Restoration of Ancient Jerusalem.*

- (3) The Rev. James King, Vicar of St. Mary's, Berwick. His subjects are as follows :—

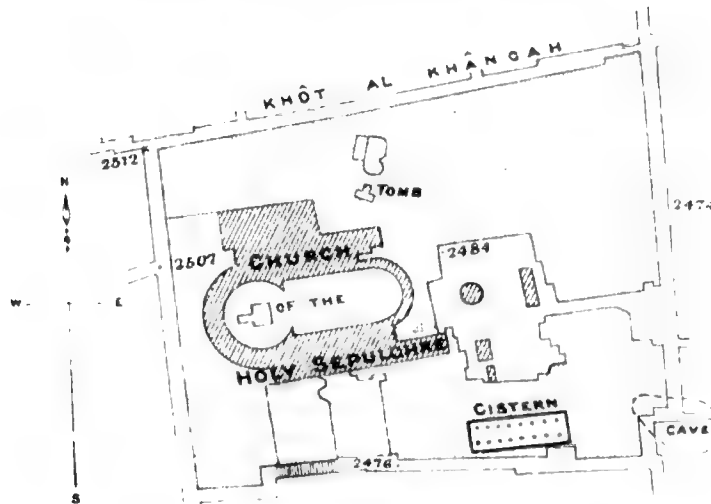
*The Survey of Western Palestine.*  
*Jerusalem.*  
*The Hittites.*  
*The Moabite Stone and other monuments.*

- (4) The Rev. Thomas Harrison, F.R.G.S., Member of the Society of Biblical Archaeology, 38, Melrose Gardens, West Kensington Park, W. His subjects are as follows :—

- (1) *Research and Discovery in the Holy Land.*
- (2) *In the Track of the Israelites from Egypt to Canaan.*
- (3) *Bible Scenes in the Light of Modern Science.*

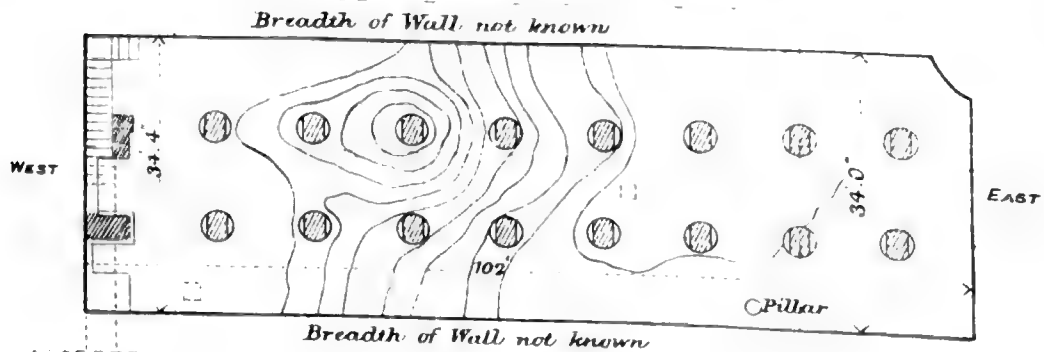


# KEY PLAN SHEWING POSITION OF THE LARGE CISTERN.

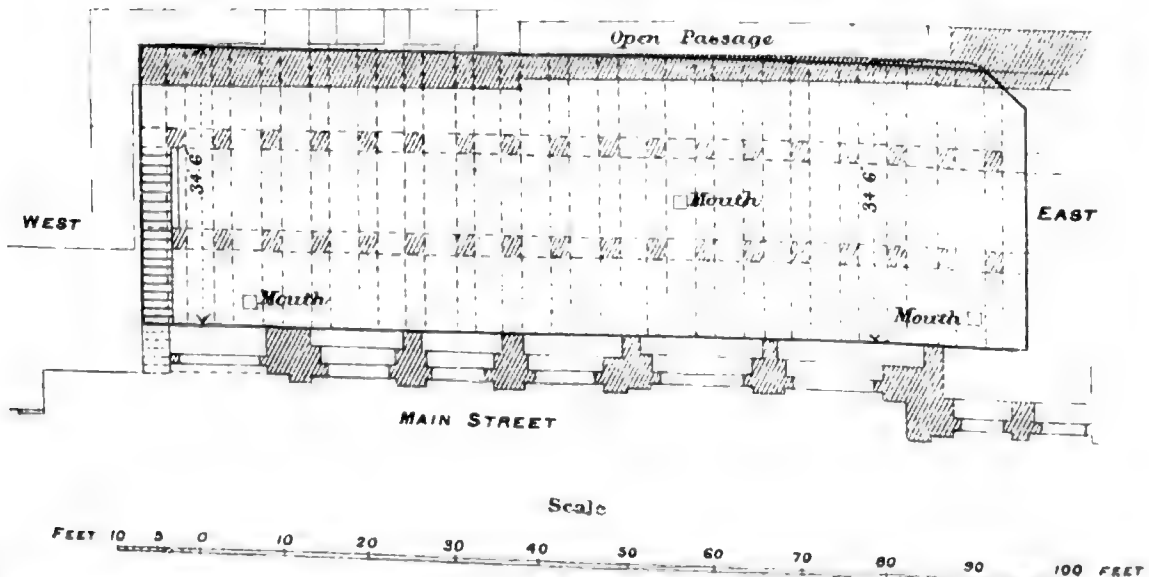


*Traced from Plan of Jerusalem  
in April Quarterly Statement.*

## PLAN OF THE LARGE CISTERN.



## PLAN OF THE ROOF OF LARGE CISTERN.





## RECENT DISCOVERIES IN JERUSALEM.

### I.

#### LARGE CISTERN UNDER THE NEW GREEK BUILDING SOUTH-EAST OF THE CHURCH OF THE HOLY SEPULCHRE.

IN several of my former reports mention is made of the discovery of a large cistern under the new Greek building erected on the site of the old Byzantine market (*Quarterly Statement*, 1888, pp. 17, 58), south of the Abyssinian Convent and St. Helena's Chapel.

Two of the three mouths of this cistern were known, but the extent and depth of it were unknown and could not be ascertained until the earth and silt, of which it was full, were removed. This was done by the Greek Convent about a year ago, some eight months being occupied in clearing the cistern out, and as the progress of this work went on the enormous construction astonished everyone who had seen it.

I have examined and measured it thoroughly in all its parts; the result I give in the accompanying plans.

1.—Plan of the bottom of the cistern.

2.—Plan of the roof over the double arches.

The cistern was found to be 102 feet long (east to west), and 34 feet 6 inches wide. The depth at the western end (measuring from the flooring of the new shop) is 34 feet, and at the eastern end 50 feet 6 inches; the bottom is all rock and very uneven.

At the west end is a flight of steps, the last four being cut out of the rock; there are 18 piers in two rows at equal distances, two of which are on the steps. The bases of the piers are round, measuring 3 feet in diameter, and composed of one or two stones from 1 foot 6 inches to 5 and 6 feet in height; the upper part of these piers is not round like the bases, but flat on two sides and round at the others.

I am unable to give any reason for this peculiarity in the shape of the upper stones, unless they were part of the remains of a former building, or more probably of the second wall.

The piers are connected at the top by arches, each arch from east to west consisting of seven well cut stones, and from north to south usually of nine stones without the springing stone, the back being filled up with masonry, over which is a layer of flag stones 4 feet 2 inches square, forming a platform on which are erected three rows of square piers, 18 in each row, each pier measuring 2 feet 4 inches by 2 feet 4 inches and 5 feet in height, and a little over 3 feet apart, each alternate pier standing over one of the lower ones. The spaces between them are filled up with earth, and over the whole is another layer of flag stones similar to those below, on which the walls of the new Greek building are erected.

The steps, with the exception of the four large ones, are 1 foot in height and 1 foot 3 to 4 inches in width. They led originally in a straight line to the top, but now the upper and narrower part turns eastwards and leads into the shop. On account of the steps one of the flag stones is placed on the top of another.

From the street a gutter leads the surface water into the cistern, falling on a short pillar erected on the bottom of it to soften the fall and prevent injury to the cement when the water is low.

The cistern has now been entirely repaired, but as some of the old cement was still clinging to the sides of it, I could not ascertain whether the walls were all masonry or not; possibly a portion may be scarped rock, but I doubt it.

The rock surface at the bottom is very uneven, it presented the appearance of stones having been quarried there; it falls greatly towards the east where the cistern is deepest, and rises to a point near the middle to within 10 feet of the springing of the arch from the top of the pier.

It is remarkable that the deepest point of the cistern is about the same level as the rock of the shaft I had sunk on the Russian property. The new cistern sunk in the *débris* by the Russians is about 75 to 80 feet east of it, and I have come to the conclusion that the space between the old and new cisterns is nothing else but *débris* and earth.

At a point in the yard or court in front of the Church of the Holy Sepulchre the rock is only a few feet from the surface, and along the side of the Convent of Abraham there is a kind of cesspool, which I examined and ascertained the form of the rock some years ago.

The question now arises, when and by whom was this enormous cistern constructed? My impression is that it was made when Constantine built the Church of the Holy Sepulchre, as the work of it is clearly neither Jewish, Mohammedan, nor Crusading, and the vaults do not resemble the latter work in the Muristan.

It may also have formed a part of the trench when the second wall ran through this neighbourhood.

The Bordeaux Pilgrim, A.D. 333, visiting Jerusalem when the Church was built, speaks of two cisterns, one to the north and one to the south of the Basilica of Constantine; the south one will be the large cistern described above, and the north one that of "Helena," so called, under the Coptic Convent, which, however, is in the greater part hewn in the rock, as it formed at that time the cistern of the Castle erected there.<sup>1</sup>

<sup>1</sup> Mr. Schick is preparing sections and other drawings showing the details of this important discovery, and these, with further notes on the subject, will appear in the next *Quarterly Statement*.

## II.

## THE MURISTAN.

A BRIEF history of the Muristan, with plans, is given in *Quarterly Statements*, 1872, p. 100, and 1875, p. 77. Sir Charles Warren, in his "Recovery of Jerusalem," describes the excavations he made there; it is also described in many other books in various languages so that there is no need for me to do it once more, but I would only wish to add that the name by which the place is known is not Arabic, but Persian and Turkish, signifying an institution or hospital for insane people, to which it was devoted by Salah ed Din after it was wrested from the Christian knights.

When the eastern part of the place was handed over in 1869 by the Sultan to the King of Prussia (the late Emperor William), the great accumulation of *débris* was partly removed, exposing the ruins that lay under it. I examined them and made a plan as far as the rubbish had been cleared away (*Quarterly Statement*, 1872, p. 100). Three years later the work proceeded, and I made a second and more extended plan, together with a section showing the surface of the rock, which I gave to Captain Conder, and which was used, together with a section of the lie of the rock, by Sir Charles Warren in his great Portfolio of Plates (No. 50). Since that time excavations have been carried on at intervals exposing more vaults, ruins, &c., which I noted and added to the plan as they appeared. Most unfortunately, in clearing away the *débris* for the foundation of a new building I found, to my great sorrow, that on the old masonry being reached the workmen at once began to lay the stones of the new walls on it, thereby preventing any further examination of the masonry below. The rock was not reached in any one point.

On the west side of the "Church Maria Major" is an underground chamber 17 feet from east to west, and 14 feet wide, covered with a cross vault; the pier is built of large and well-hewn stones, the walls are not so well done. But the interesting part is a rather flat arch just under the vault, 2 feet 6 inches wide and 1 foot 8 inches thick, consisting of about twelve well dressed stones, in which are pierced two holes of about one foot square.

West of this chamber, and on a somewhat higher level, a flight of broad steps was found leading up to a kind of platform or terrace, having near its centre the mouth of a cistern, which, on being cleared of earth, was found to be 26 feet long by 15 feet wide and 30 feet deep, and rock at the bottom. On the west side of this terrace are some steps of well-hewn stones; in the corner is a quarter pillar, and south of it a half projecting pillar; between these was originally an arch and an opening, now walled up. To the west is a vault joining the Gethsemane convent, having a large arched opening in the south wall and three small ones on the north.

Close to the steps is a small chamber with two recesses in the wall,

which I thought would lead to a tomb, but the excavations were not carried far enough to determine this, and the parts were partly built over again according to the new plan.

South of the cistern are some vaults, built of very small stones, with very thick piers, of no great interest, excepting that a door leads from them to a long row of vaults on the same level, and also by some steps to the roof over them. On the top of this roof or terrace, and right over a thick pier, is the base of a circle of twelve pillars, which I suggest to have been a font, as there is no evidence of any counter piers or similar bases. The western side of this terrace has a wall reaching to a higher elevation, having two openings in it for lighting the vaults below. Some steps lead to another terrace higher up, on which once stood a series of very small chambers. The best preserved of them has been apparently an oriental bath, with a beautifully ornamented door.

East of the cistern and vaults already mentioned there appears to have been a narrow lane, partly arched over, of the Crusading period, and near the end of this lane,<sup>1</sup> on the west side, is a block of inferior masonry having five small cemented tanks with a hole in the bottom of each — the two outer ones circular, the other three are 5 feet square and 4 feet deep.

For illustration of the connecting pipes with the cistern found by Sir Charles Warren in the year 1867, *see* large Portfolio, Plate 50, number 36.

Careful examination of the long cistern and some arches in the German part brought me to the conclusion that a street ran through these parts in Jewish times, and had been partly hewn in the rock. I hope that in clearing away the portions necessary for the construction of a new street between the German and Greek properties, some additional information will be obtained.

### III.

#### CRUSADING RUINS ON MOUNT SCOPUS.

AN Effendi family of Jerusalem have recently built two new houses to the north of the Tombs of the Kings, on the lower slope of Mount Scopus, to the west of and close to the Nablus road, immediately north of the spot where the latter makes a sharp turn to the east and between the numbers 2543 and 2555·8 on the Ordnance Survey Map. Another member of this family is about to build another house, opposite those already erected and to the east of the road. On clearing the ground he discovered a cistern and also a small ruined building with a mosaic floor and a large cross cut in a stone slab. On visiting the spot I found a boundary wall nearly

<sup>1</sup> In a plan published by Count de Vogué, at page 174 of his "*Eglises de la Terre Sainte*," a lane is marked between the Church of Ste. Marie la Grande and the Muristan.

6 feet thick, enclosing a piece of ground about 130 feet long on the west, 125 feet on the east, a little more than 100 feet on the north, and 142 feet on the south. The wall has been destroyed in some places, only a heap of stones being left. The ground is level from west to east, but rises slightly from south to north. About the middle of it was found a mosaic pavement of coloured stones. Traces of walls are still visible. Apparently they had formed a small room or chapel, measuring about 16 or 17 feet. The entrance was on the south side; the threshold is still *in situ*, with the sockets in it for the door. The doorway was only 3 feet 2 inches broad. Running from it across the interior of the building was a pavement 2 feet 5 inches wide, consisting of seven stone slabs, carefully hewn and smoothed. The first of these had been recently removed, and made into a well mouth. Nothing was found under it. The fifth and sixth slabs are longer than the others, and on the sixth is engraved a cross 3 feet long, with a cross bar of about 2 feet. The cutting is 2 inches deep and about 5 inches wide, but the limbs of the cross are widened at the extremities and the ends cut so as to form sharp angles. The cross is embraced by a round rod or cord, of 1 inch thickness. The bearing is north  $17^{\circ}$  east. As the floor of the chamber is level, whilst the ground outside rises towards the north, its northern wall is a rock scarp several feet high. The earth on the east was not yet removed. On the western side two layers of stones are seen to remain, and on the south side one. The stones are 1 foot 4 inches long and 1 foot high, not well dressed, and apparently intended to be plastered over on the inner side. It is remarkable that the west wall does not run at a right angle but is slanting, so that at first I thought it to be a later restoration. This, however, does not seem to be the case. To the south-west of this wall is a ruin with thick walls and formerly vaulted. The whole settlement appears to be Crusading, though there may have been some Byzantine buildings at an earlier date, and to these I would ascribe the mosaic flooring and the rock scarp. South of the court is a small rock-hewn cistern. Along the western boundary it is easy to recognise the ancient road; the present road is 60 feet farther to the west.

The question now arises, What was this building? Was it a tomb or a chapel? Or was it a tomb and chapel? It is impossible at present to determine. It may be that under the slab with the cross a tomb may be found. But I doubt it, as in that case a path paved with similar slabs would not have led up to it. To me it seems that where the cross now is an *altar* once stood, and that the enclosure was uncovered, like Joseph's tomb at Nablus, or only roofed with wood, as the walls are not strong enough to support a vault. The other ruin would then be the lodging of the guardian of the place. Perhaps some distinguished knight may have fallen or been buried here.

3. With regard to the Pool Bethesda, I have nothing new to communicate, as very little work has been done since I sent my last report. I am told that after Easter the excavations will be resumed. The same is the case at the Latin Patriarchate.

4. A French congregation has bought a piece of ground on the slope of the hill east of Neby Daúd, half way down, and are now excavating there. I went to the place and inspected what has been found, and am making drawings and a report, which I hope to forward by next mail.

5. The Greek bishop also is excavating on the top of Mount Olivet (the Galilee part). He has invited me to go and see what has been done, promising to show me everything.

C. SCHICK.

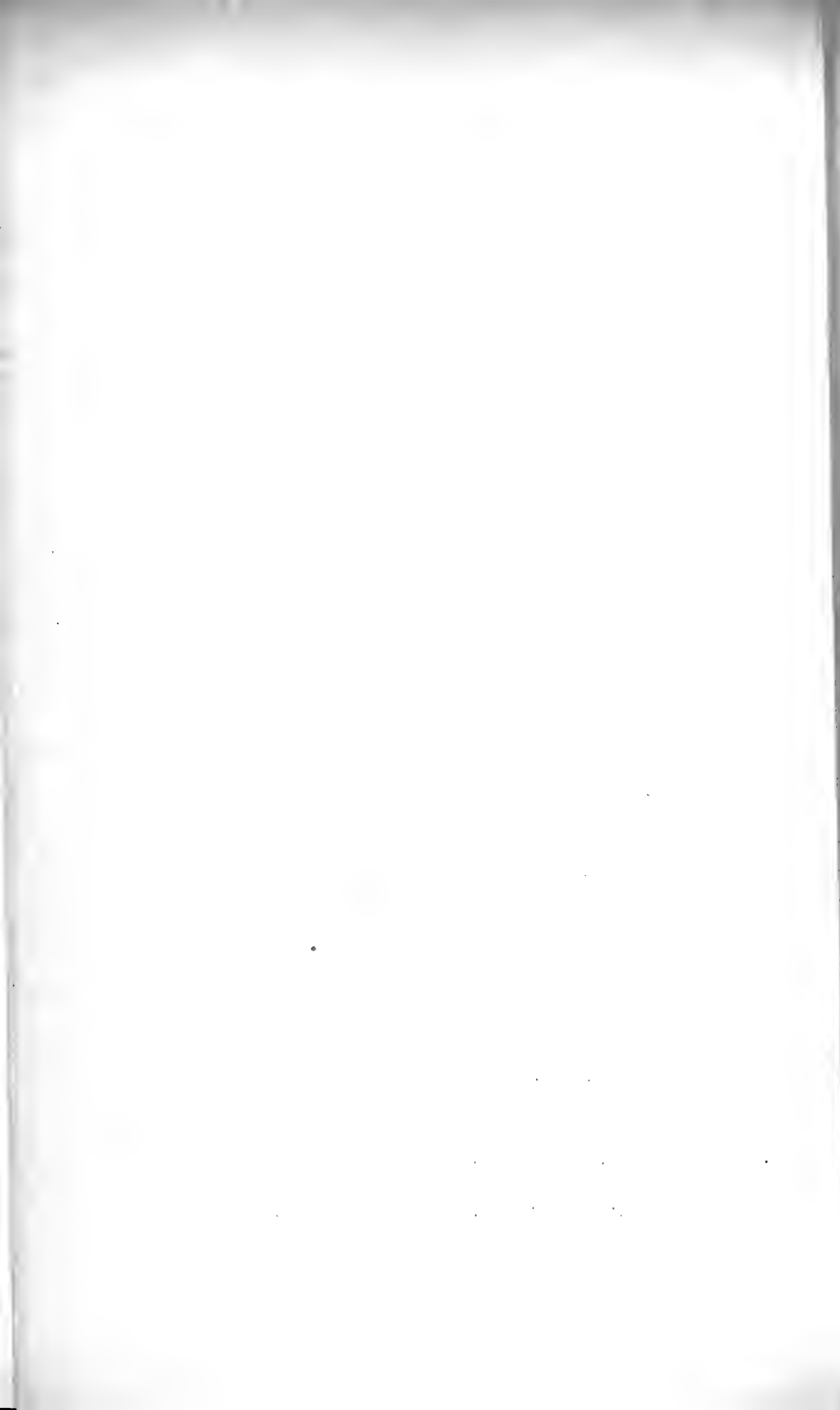
#### IV.

##### DISCOVERIES NORTH OF DAMASCUS GATE.

THE year before last a rock-cut channel was discovered in the ground belonging to the Dominicans, north-west of the hill above Jeremiah's Grotto, a little to the east of the ruined church described at page 388 of the Jerusalem volume of the "Survey of Western Palestine." Thinking it might prove to be an aqueduct connected with the ancient water supply of the city, Mr. Schick made some excavations on the spot, and discovered that the trench, which is cut 14 feet deep in the rock, runs 44 feet in a northerly direction, then turns at a right angle towards the east, and at a distance of 29 feet makes another turn towards the south, in which course it runs for 44 feet, and then turning westward for 29 feet joins the southern end of the portion first described, thus enclosing a solid mass of rock, measuring some 40 feet by 25 feet. The trench, therefore, is not part of an aqueduct, but, as Mr. Schick now thinks, represents the commencement of the work of excavating a tank or cistern, and is a valuable illustration of the way in which these receptacles for water were made in ancient times. After visiting the place in the month of February of the present year, Mr. Schick writes: "As the ground where I excavated for the supposed aqueduct is now entirely cleared, it is easy to see that when this deep groove was hewn in the rock it was intended to make a tank or pool, and to quarry stone for building at the same time. It is evident that this was done in the Jewish period, and that the Christians afterwards filled up the cutting." Another pool was afterwards discovered by the monks to the south of this incomplete one examined by Mr. Schick, and separated from it by a wall of rock 5 feet thick. This pool is also cut in the rock, but, owing to the shelving of the rock, the south-western corner is formed of a wall of hewn stones, amongst which are two pieces of pillar shafts, which Mr. Schick regards as proof that the pool was in use in Crusading times.

The whole ground was measured, and a plan of the ancient remains sent home by Mr. Schick. He finds remains attributable to five epochs, namely, the Jewish, Byzantine, Crusading, Mohammedan, and modern. To the Jewish period belong, he considers, the rock-cut tombs at the foot







MONTHLY METEOROLOGICAL TABLE DEDUCED FROM OBSERVATIONS TAKEN AT SARONA BY HERR J. DREHER IMMEDIATELY NORTH OF THE GREAT ORANGE GROVES OF JAFFA, SYRIA, 1½ MILE FROM THE SEA SHORE, ON SANDY SOIL, AND ABOUT 50 FEET ABOVE SEA-LEVEL. LATITUDE 32° 4' N., LONGITUDE 34° 47' E.

By JAMES GLAISHER, F.R.S.

| Months, 1884.   | Pressure of Atmosphere in Month.<br>Corrected to 32° Fahrenheit. |               |              |               | Temperature of the Air in Month. |         |        |                      |                     |                   |       | Mean Reading at 9 a.m. |           |            | Vapour, 9 a.m.           |                                |  | Degree of Humidity. | Weight of a Cubic Foot of Air. | Wind.                  |            |           |            |            |            |            |            | Mean Amount of Cloud. | Rain.                 |                                  |                   |
|-----------------|--|---------------|--------------|---------------|----------------------------------|---------|--------|----------------------|---------------------|-------------------|-------|------------------------|-----------|------------|--------------------------|--------------------------------|--|---------------------|--------------------------------|------------------------|------------|-----------|------------|------------|------------|------------|------------|-----------------------|-----------------------|----------------------------------|-------------------|
|                 | Highest.   | Lowest.       | Range.       | Mean.         | Highest.                         | Lowest. | Range. | Mean of all Highest. | Mean of all Lowest. | Mean daily Range. | Mean. | Dry Bulb.              | Wet Bulb. | Dew Point. | Elastic Force of Vapour. | Weight in a Cubic Foot of Air. | Additional Weight required for Saturation. |                     |                                | Relative Proportion of |            |           |            |            |            |            |            |                       | Calm, or nearly Calm. | Number of Days on which it fell. | Amount Collected. |
|                 |  |               |              |               |                                  |         |        |                      |                     |                   |       |                        |           |            |                          |                                |  |                     |                                | N.                     | N.E.       | E.        | S.E.       | S.         | S.W.       | W.         | N.W.       |                       |                       |                                  |                   |
| January .. ..   | in.<br>30·262  | in.<br>29·678 | in.<br>0·584 | in.<br>30·010 | 71·0                             | 32·0    | 39°0   | 60°2                 | 40°9                | 19°3              | 50°5  | 51°3                   | 49°0      | 46°6       | grs.<br>319              | grs.<br>3·6                    | grs.<br>0·7                                | 84                  | grs.<br>543                    | 0                      | 1          | 1         | 5          | 14         | 1          | 1          | 1          | 7                     | 6·6                   | 14                               | ins.<br>6·69      |
| February .. ..  | 30·230   | 29·700        | 0·530        | 29·945        | 65·0                             | 41·0    | 24·0   | 60·3                 | 46·2                | 14·1              | 53·3  | 53·6                   | 51·7      | 49·9       | 358                      | 3·7                            | 0·6  | 87                  | 540                            | 2                      | 3          | 0         | 3          | 13         | 0          | 1          | 1          | 6                     | 7·3                   | 18                               | 6·09              |
| March .. ..     | 30·133   | 29·597        | 0·536        | 29·892        | 79·0                             | 42·0    | 37·0   | 66·5                 | 48·3                | 18·2              | 57·4  | 61·3                   | 57·2      | 53·7       | 412                      | 4·6                            | 1·5  | 76                  | 530                            | 1                      | 1          | 2         | 5          | 7          | 5          | 4          | 1          | 5                     | 5·3                   | 10                               | 1·49              |
| April .. ..     | 30·013   | 29·505        | 0·500        | 29·723        | 97·0                             | 46·0    | 51·0   | 77·8                 | 53·4                | 24·4              | 65·6  | 71·7                   | 62·2      | 55·0       | 435                      | 4·7                            | 3·7  | 56                  | 517                            | 0                      | 4          | 3         | 1          | 3          | 7          | 4          | 2          | 6                     | 5·7                   | 4                                | 1·02              |
| May.. ..        | 29·946   | 29·670        | 0·276        | 29·841        | 98·0                             | 49·0    | 49·0   | 77·2                 | 57·0                | 20·2              | 67·1  | 72·6                   | 65·8      | 60·7       | 533                      | 5·7                            | 2·9  | 66                  | 517                            | 3                      | 0          | 0         | 0          | 1          | 10         | 5          | 10         | 2                     | 5·0                   | 2                                | 0·49              |
| June .. ..      | 29·930   | 29·703        | 0·227        | 29·828        | 97·0                             | 58·0    | 39·0   | 84·4                 | 63·7                | 20·7              | 74·0  | 80·1                   | 69·6      | 62·4       | 564                      | 6·0                            | 5·0  | 55                  | 510                            | 1                      | 1          | 0         | 0          | 0          | 6          | 14         | 5          | 3                     | 1·9                   | 1                                | 0·02              |
| July.. ..       | 29·899   | 29·600        | 0·299        | 29·717        | 96·0                             | 61·0    | 35·0   | 85·0                 | 66·0                | 19·0              | 75·5  | 81·2                   | 72·4      | 66·5       | 649                      | 7·0                            | 4·4  | 61                  | 507                            | 0                      | 0          | 0         | 0          | 0          | 11         | 18         | 0          | 2                     | 3·4                   | 0                                | 0·09              |
| August .. ..    | 29·849   | 29·582        | 0·267        | 29·707        | 90·0                             | 63·0    | 27·0   | 86·0                 | 68·9                | 17·1              | 77·4  | 82·5                   | 73·8      | 68·0       | 685                      | 7·3                            | 4·6  | 62                  | 505                            | 0                      | 0          | 0         | 0          | 1          | 13         | 8          | 4          | 5                     | 3·0                   | 0                                | 0·00              |
| September .. .. | 30·015   | 29·665        | 0·350        | 29·817        | 86·0                             | 61·0    | 25·0   | 83·7                 | 64·3                | 19·4              | 74·3  | 79·8                   | 70·6      | 64·3       | 603                      | 6·4                            | 4·5  | 59                  | 510                            | 2                      | 1          | 0         | 0          | 3          | 13         | 4          | 2          | 5                     | 3·8                   | 0                                | 0·00              |
| October .. ..   | 30·002   | 29·783        | 0·219        | 29·900        | 100·0                            | 55·0    | 45·0   | 81·8                 | 60·5                | 21·3              | 71·2  | 78·6                   | 67·2      | 59·3       | 508                      | 5·5                            | 4·9  | 52                  | 513                            | 1                      | 1          | 0         | 3          | 5          | 6          | 0          | 2          | 13                    | 4·0                   | 5                                | 1·16              |
| November .. ..  | 30·063   | 29·832        | 0·231        | 29·952        | 79·0                             | 47·0    | 32·0   | 72·8                 | 52·9                | 19·9              | 62·8  | 59·8                   | 58·1      | 56·6       | 458                      | 5·2                            | 0·7  | 90                  | 533                            | 1                      | 0          | 0         | 5          | 6          | 0          | 1          | 4          | 13                    | 4·2                   | 8                                | 1·32              |
| December .. ..  | 30·143   | 29·816        | 0·297        | 29·980        | 82·0                             | 38·0    | 44·0   | 70·9                 | 48·6                | 22·3              | 59·8  | 59·9                   | 55·4      | 51·5       | 381                      | 4·2                            | 1·6  | 73                  | 533                            | 0                      | 7          | 2         | 4          | 1          | 0          | 0          | 1          | 16                    | 3·7                   | 3                                | 0·45              |
| Means .. ..     | 30·040   | 29·680        | 0·360        | 29·859        | 86·7                             | 49·3    | 37·3   | 75·6                 | 55·9                | 19·7              | 65·7  | 69·4                   | 62·8      | 57·9       | 491                      | 5·3                            | 2·9  | 68                  | 521                            | Sum.<br>11             | Sum.<br>19 | Sum.<br>8 | Sum.<br>26 | Sum.<br>54 | Sum.<br>72 | Sum.<br>60 | Sum.<br>33 | Sum.<br>83            | 4·5                   | Sum.<br>65                       | Sum.<br>18·73     |

Number of Column .. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

of the hill over Jeremiah's Grotto, one of which was regarded by the late General Gordon as the tomb of our Lord, also some rock-cuttings, a quarry, and several of the rock-hewn cisterns. To the Byzantine period he attributes the church above alluded to, some walls and thresholds of doors, a group of three tombs partly hewn in the rock, some fragments of pillars and pieces of mosaic pavement, and adds that the flooring of the Crusading buildings lay about 4 feet 6 inches higher than that of the Byzantine structures, so that the rock-hewn channel and mosaic pavements were covered by it. "A characteristic feature of Crusading work," Mr. Schick writes, "is presented in the long vaults, four of which are in great part still standing north of the Byzantine church. They were originally more than 75 feet long and are only 23 feet wide. Such vaults are always found on the settlements of the Crusaders, some larger, some smaller, and either only one or more in number. They get light only from the two ends and from the door and windows over the door. The vaulting is always something more than a semicircle, and more or less pointed. There are a few air-holes, like chimneys, in the roof. They appear to have been used as magazines for various kinds of goods, sleeping places for pilgrims, and even as stables. A long narrow pit, formerly, as it seems, a cistern, or rather channel for rain water, was arched over by the Crusaders and made the main sewer of their establishment." (*See Quarterly Statement*, 1883, p. 241.)

## METEOROLOGICAL OBSERVATIONS.

SARONA, 1884.

THE numbers in column 1 of this table show the highest reading of the barometer in each month; the maximum for the year was 30·262 ins., in January. In the years 1880 and 1881 the maximum was in January, as in this year, in 1882 in February, and in 1883 in December; the mean of the four preceding highest pressures was 30·215 ins.

In column 2, the lowest reading in each month is shown; the minimum for the year was 29·505 ins., in April. In the year 1880 the minimum was in April, in 1881 in February, in 1882 in July, and in 1883 in January; the mean of the four preceding lowest pressures was 29·521 ins.

The range of barometric readings in the year was 0·757 inch; the mean of the four preceding years being 0·694 inch.

The numbers in the 3rd column show the range of readings in each month; the smallest, 0·219 inch, was in October, and the largest, 0·584 inch, in January.

The numbers in the 4th column show the mean monthly pressure of the atmosphere; the greatest, 30·010 ins., was in January. In the years 1880, 1881, and 1882, the greatest was in January as in this year, and in 1883 was in February; the smallest, 29·707 ins., was in August. In the years 1880, 1882, and 1883, the smallest was in July, and in 1881 in August.

The highest temperature of the air in each month is shown in column 5 ; the highest in the year was  $100^{\circ}$ , in October. In the four preceding years, viz., 1880, 1881, 1882, and 1883, the highest temperatures were  $103^{\circ}$ ,  $106^{\circ}$ ,  $93^{\circ}$ , and  $106^{\circ}$  respectively. The next in order was  $98^{\circ}$  in May, and  $97^{\circ}$  in both April and June. The first day in the year the temperature reached  $90^{\circ}$  was on April 13, and it exceeded  $90^{\circ}$  on three other days in this month : in May on one day ; in June on four days ; in July on one day ; in August on one day, and in October it reached or exceeded  $90^{\circ}$  on three days ; the highest in the year,  $100^{\circ}$ , took place on the 16th ; therefore the temperature reached or exceeded  $90^{\circ}$  on 14 days ; in the year 1880 on 36 days ; in 1881 on 27 days ; in 1882 on 8 days, and in 1883 on 16 days in the year.

The numbers in column 6 show the lowest temperature in each month. The lowest in the year was  $32^{\circ}$  in January ; the next in order was  $38^{\circ}$  in December, and  $41^{\circ}$  in February. In January the temperature was as low as  $32^{\circ}$  on two nights, and below  $40^{\circ}$  on six other nights in this month, and on one night in December ; therefore the temperature was below  $40^{\circ}$  on 9 nights in the year ; in 1880 it was below  $40^{\circ}$  on 13 nights ; in 1881 on 2 nights ; in 1882 on 13 nights, and in 1883 on 2 nights.

The yearly range of temperature was  $68^{\circ}$  ; in the four preceding years viz., 1880, 1881, 1882, and 1883 the yearly ranges of temperature were  $71^{\circ}$ ,  $67^{\circ}$ ,  $59^{\circ}$ , and  $71^{\circ}$  respectively.

The range of temperature in each month is shown in column 7, and these numbers vary from  $24^{\circ}$  in February to  $51^{\circ}$  in March.

The mean of all the highest temperatures by day, of the lowest by night, and of the average daily ranges of temperature are shown in columns 8, 9, and 10 respectively. Of the high day temperature the lowest,  $60^{\circ}2$ , is in January, and the highest,  $86^{\circ}$ , in August ; of the low night temperature the coldest,  $40^{\circ}9$ , is in January, and the warmest,  $68^{\circ}9$ , in August ; the average daily range of temperature, as shown in column 10, in February  $14^{\circ}1$  is the smallest, and in April  $24^{\circ}4$  is the largest.

In column 11 the mean temperature of each month is shown, as found from observations of the maximum and minimum thermometers only. The month of the lowest temperature was January,  $50^{\circ}5$ , and that of the highest was August,  $77^{\circ}4$ . The mean temperature for the year was  $65^{\circ}7$ , and of the four preceding years, viz., 1880, 1881, 1882, and 1883 were  $66^{\circ}4$ ,  $66^{\circ}7$ ,  $65^{\circ}5$ ,  $65^{\circ}7$  respectively.

The numbers in columns 12 and 13 are the monthly means of a dry and wet bulb thermometer taken daily at 9 a.m. In column 14 the monthly temperature of the dew point, or that temperature at which dew would have been deposited at the same hour is shown ; the elastic force of vapour is shown in column 15. In column 16 the water present in a cubic foot of air is shown ; in January it was as small as 3.6 grains, and in August was as large as 7.3 grains. The numbers in column 18 show the degree of humidity, moisture being considered 100 ; the smallest number is in October, 52, and the largest in November, 90 ; the weight of a cubic

foot of air under its pressure, temperature, and humidity at 9 a.m., is shown in column 19.

The most prevalent wind in January was S., and the least prevalent was N. In February the most prevalent was S., and the least were E. and S.W. In March the most prevalent was S., and the least were N. and its compounds. In April the most prevalent wind was S.W., and the least was N. In May the most prevalent were S.W. and N.W., and the least were E. and its compounds. In June the most prevalent was W. and the least were E., S.E. and S. In July and August the most prevalent were W. and S.W., and the least were E., S.E., S., N. and its compounds. In September the most prevalent was S.W., and the least were E. and S.E. In October the most prevalent were S. and S.W., and the least were E. and W. In November the most prevalent were S. and S.E., and the least were N.E., E., and S.W. In December the most prevalent wind was N.E., and the least were N., S.W., and W. The most prevalent wind for the year was S.W., which occurred on 72 times during the year, of which 13 were in both August and September, and 11 in July; and the least prevalent wind was E., which occurred on only 8 times during the year, of which three were in April, two in both March and December, and one in January.

The numbers in column 29 show the mean amount of cloud at 9 a.m.; the month with the smallest amount is June, and the largest February. Of the cumulus, or fine weather cloud, there were 143 instances in the year; of these there were 24 in July, 20 in August, 19 in September, and 4 only in December. Of the nimbus, or rain cloud, there were 39 instances, of which 13 were in February, 10 in January, and 5 only from May to October. Of the cirrus there were 39 instances. Of the cirro-stratus there were 17 instances. Of the stratus there were 13 instances, and 74 instances of cloudless skies; of these there were 16 in June, 12 in December, and 11 in November.

The largest fall of rain for the month in the year was 6.69 ins. in January, of which 2.09 ins. fell on the 22nd, 1.56 inch on the 23rd, and 0.74 inch on the 20th. The next largest fall for the month was 6.09 ins. in February, of which 0.76 inch fell on the 25th, 0.66 inch on the 24th, and 0.64 inch on the 16th. No rain fell from June 23rd till the 20th of October, making a period of 118 consecutive days without rain. In 1880 there were 168 consecutive days without rain; in 1881, 189 consecutive days without rain; in 1882 there were two periods of 76 and 70 consecutive days without rain; and in 1883, 167 consecutive days without rain. The fall of rain for the year was 18.73 ins. being 9.95 ins., 3.36 ins., and 11.33 ins. less than 1880, 1882, and 1883 respectively, and 1.24 inch larger than in 1881. The number of days on which rain fell was 65. In 1880 rain fell on 66 days, in 1881 on 48 days, in 1882 on 62 days and in 1883 on 71 days.

JAMES GLAISHER.

REPORT ON ANSWERS TO THE "QUESTIONS." <sup>1</sup>

ONE of the earliest sets of answers received from Palestine to the questions as to the inhabitants of the country, drawn up for the P. E. F. Committee, has been sent by Mr. Joseph Jibrail, who has personal knowledge of the Druzes, the Metawileh, and other elements of population. Some of the answers are meagre, and, as regards the nomadic Arabs, he appears to know less than the English explorers, who have spent years among them. An abstract of the more interesting points of information thus obtained may, however, serve to show what may be expected from this method of research. Answers to questions as to the Samaritans have already appeared in the *Quarterly Statement*.

*The Druzes.*

Mr. Jabrail reports that he has been inside the Khalwehs or Chapels of the Druzes when living as a teacher among those on Mount Carmel. The Druzes are intelligent, and allow strangers to eat and drink with them; they desire education for their children, and allow them to learn parts of the Bible by heart. They believe that there are many Druzes in China, and that the religion of Queen Victoria is the Druze religion though its votaries are not known by that name in England.

*Note.*—This I have before heard stated. The connection of the Druzes with the Buddhists of Central Asia and China is noted in "Syrian Stone Lore," p. 347.

On attempting to enter a Khalweh on Thursday (the usual day of meeting for the Druzes) Mr. Jabrail was attacked by two Druze women standing by the door, and the congregation came out and cursed and stoned him, not recognising him as a former friend.

*Note.*—The Druze meetings are secret. The women evidently were sentinels such as writers on the Druzes have described as posted outside the Khalwehs during meetings.

The Sheikh objected to the Druze children being taught that the world was made in six days, asserting that God created it all at once. Mr. Jabrail mentions the well-known fact that the Druzes conform outwardly to any creed which suits their purposes for the time.

*Note.*—Both these observations connect Druze teaching and customs with those of some of the early Gnostic sects of Syria.

Nothing is found in the Khalwehs of Lebanon except a stove. Texts from the Koran are written on the walls. It is generally reported that the "calf" is an image found in the Khalwehs. When asked about it the Druzes cursed it.

*Note.*—This agrees with the reports of previous writers, who say that the Druses called Derâzeh "the calf" (بجل) instead of "the wise"

<sup>1</sup> See *Quarterly Statement*, 1885, p. 216.

(حانوك) and curse him as a heretic because he quarrelled with Hamzeh, although he was the real founder of the sect on Hermon.

They take figs and raisins into the Khalwehs and eat them in company. If a man sins he brings raisins as a sacrifice into the Khalweh. He further says, "I have seen them presenting figs to one another when they met."

*Note.*—The fig is said by some writers to be a token among the Druzes. Cyril of Jerusalem speaks of the "detestable ceremony of the fig" (Catech. Lect. vi, 23) among the Manicheans of the 4th century in Palestine.

They believe China to be a Holy Land, and that when a Druze dies he will be re-born in China. They say no man can enter China, and when told that many people have done so, say it was not the true China. They believe that Gog and Magog will come from China to destroy Mecca and all Moslems and Christians.

*Note.*—This seems to be a survival of the old legend of Gog and Magog shut up beyond the wall in the north, which has been fully noticed in the *Quarterly Statement* for 1888.

They meet in numbers in secret, women being present. They then pray, eat figs and raisins, and discuss their affairs. They are divided into

two classes—*عقال* "wise," and *جبال* "ignorant." The 'Akkâls,

again, are divided into *خاصة* and *عامة* or "special" and "ordinary," who have different degrees of initiation. There is a yet higher initiation

—that of the Munazzahîn *منزهين* or "purified." Some 'Akkâls are

celibates. None of them drink intoxicating liquors or smoke. They

wear a white turban *عمامة* (mâmah), and a cap without a tassel.

Women may be 'Akkâlah's, and then wear dark stuff on the head.

*Note.*—This agrees with what is known of the various degrees of initiation among Druzes. (See "Syrian Stone Lore," p. 347.)

They observe the two Moslem feasts, and a third special to themselves in spring time, called "Egg Thursday" *خميس البيضات*

*Note.*—Perhaps to be compared with the widespread custom of the Pasch eggs or Easter eggs.

They know the signs of the Zodiac and names of certain stars or planets. They believe that war will occur in any country when a comet appears, and that the country towards which its tail points will have abundance.

The informant also states that the Druzes practice circumcision. He gives some information as to their belief in the reincarnation of Adam, which is already well understood from the works of De Sacy and others. He refers to their feasts at the shrine of *El Khudr* and to the lighting of lamps on tombs. They are not particular as to food, and will eat meat



prepared by Christians or Moslems. Their morality is described as good, few women being unchaste, and very few illegitimate births occurring.

They have sacred trees on which rags are tied; and he mentions a holy spring where the sick are said to be cured in the Lebanon. They have many legends of demons and spirits—one Druze stating that he passed by a spring at night and heard cries and found people dancing, who gave him a drum, but disappeared when he repeated the name of God. Some people they believe can talk with spirits. They fear the Ghoul, whom they imagine a furious beast. They dance in honour of Welys and Nebys (Saints and Prophets), but not for the dead. The women dance in a circle alone. The chorus of one song is given thus—

شيل يا جمال وشيل وشيل ومحمل حرير

"Bring forth, O camel driver, bring forth, bring forth the silk Mahmal" (an allusion, perhaps, to the annual sending of the Mahmal to Mecca, though otherwise explained).

Another song runs thus (freely rendered)—

See her at the well of Taha and give her good-day,  
And if her father will not give her, take her by night and fly.

The men dance by themselves and sing war songs.

Next follows the curious legend that *Belkís* (the Queen of Sheba) asked Solomon for a jug of water neither from Heaven nor from Earth. He gave her one filled with the sweat of a horse.<sup>1</sup>

The custom of giving the weight of a child's hair when first cut to the poor is noticed.

*Note.*—This is noticed by Lane, in "Egypt."

They believe in the Evil Eye and wear charms against it. They believe in men being changed to beasts, &c., by enchantment. They turn their gold and silver in their pockets at the new moon. They consider the crow and owl to presage death. It is unlucky to see an old woman first thing in the morning, or to dream of a camel (an instance is given of the latter). The Sheikhs pray over those supposed to be bewitched by the Jân, and charms are worn against such bewitchment. It is irreligious to steal what is placed in a *Makâm*. Eggs are used as a charm on house walls against the Evil Eye, and charms written over doors against the Jân. They have books for the interpreting of dreams.

<sup>1</sup> This is explained by a story given in Landberg's "Proverbes et Dictons," p. 161. The youth who is to marry the riddle-asking princess asks her how he could have drunk water neither from heaven nor from earth—

و شرب ما به لامن ارض ولا من سما

The answer, which she could not discover, was that in the desert he took the sweat from his horse and licked his hand to moisten his mouth.

Personal property in land is inherited, and the Sheikh has no power over such property. The Carmel Druzes say that they came from Aleppo 150 years ago. Some of the Lebanon Sheikhs claim descent from Arab tribes named ركين (*Rakîn*) and خميس (*Khamîs*). Others say they are of Persian descent. They call themselves بني المعروف (*Beni el Marûf*) and الموحدون "the Unitarians." The better families are of pure race. They all wear the beard long.

As regards language, several colloquial words are given, but these do not seem interesting or peculiar. They do not distinguish easily the Arab gutturals, which are so carefully pronounced by educated Arab scholars.

They are healthy as a rule, suffering, however, from ague, small pox, and sore eyes and fever. They have native doctors, and use medicines, such as mustard for a purgative, poppy as a sedative, and camomile, and they let blood, and use charms written by the Sheikh, against sickness. The old women are clever in making simples of fruit, vegetables, and herbs. The commonly known poisons are preparations of arsenic and mercury. The sick are regarded as bewitched or suffering from the Evil Eye. Plague and scarlet fever are unknown. The 'Akkâls use prayers, charms, and medicines against disease.

The rotation of crops is to a certain extent understood, and pruning of trees.

The Druzes do not beg from strangers.

As regards dress, the women of the Druzes in the Lebanon are veiled, but not elsewhere.

*Note.*—I remarked that the Druze women on Carmel were not veiled.

The women wear sometimes a flat silver plate (قرص) on the head.

They use Kohl and Henna, but do not paint or tattoo the face.

They do not shave the hair in sign of mourning.

They cultivate silk and keep bees. The Lebanon and Haurân Druzes serve as soldiers.

They will eat all sorts of food, including cats, hyenas, and jackals.

*Note.*—I have seen Arabs eating a jackal.

They think thyme is good to eat for making men wise. They drink cinnamon water, and the devotees abstain from coffee, from figs, and from grapes. On Fridays the Druzes eat a peculiar dish of wheat and molasses boiled. They are fond of sweets and raisins. They use rosaries, but are said by the informant to do so only as an amusement.

*Note.*—This I have also heard said of Moslems.

Among themselves they salute by kissing hands, and bow to others with the hand on the breast. They swear by God, *Shaîb* (Jethro), *el Hâdî* (their expected Messiah), and *el Hokmah* ("wisdom").

They lend to each other without interest. They are rarely artizans, generally farmers. They have pet dogs and cats, and a few rich people



have birds in cages. They give human names to such pets (*e.g.*, *Ferha*, a woman's name, given to a goat).

*Note.*—Many Moslems object to such names for animals.

A few make pottery and silk, or are silversmiths and brass-workers, gunsmiths and carpenters. None are merchants.

*Note.*—The informant says no one in Syria makes glass, but this is incorrect, as it is made at Hebron.

The house walls are occasionally painted by the women to represent palm trees, birds, &c.

They play cards and listen to stories of *Antar*, *Zir*, and the *Beni Helâl*. The elders are familiar with such tales and with stories about the *Jân*.

An instance is given of a prince wandering in the desert, who reaches a building full of beautiful girls, daughters of the King of the *Jân*. The earth swallowed him with them, and he was carried to the city of the *Jân*.

The formula for the commencement of such tales is given. "Once upon a time, it happened, as we will tell to-day—and to-morrow we will sleep—I will tell of troubles and lamentations; of Dibs esh Shadid, the man of Baalbek. It was in the days of one of the kings of old."

The Druze children are said to play quoits, and ball games, seesaw, and with swings, prisoners' base and dancing, also Mankalah (a sort of draughts).

The men are famous *Jerid* players. They hunt and shoot, and make a hiding-place, *تقلوم* to await the game, of stones and rushes. They hire gipsy performers to amuse them. The showmen have bears, monkeys, goats, and apes, which perform.

*Note.*—I have seen a showman with a performing bear in Syria.

The showman goes to a village to the Sheikh's house and begins to sing and to dance with his animal. He tells his animal to drink in the Sheikh's honour. The snake charmers sell oil to the people as a preventative against snake bite.

The men also play chess, draughts, and *Deris*—a game which the informant afterwards describes.

At birth the children are rubbed with salt and with a powder of *Rihân*; the child is suckled from six to nineteen months.

The Druzes have only one wife each. Their children inherit equally. The families are small. The men marry about 18 to 22, the women at 14 to 17 years of age. Sisters, nieces, and aunts are forbidden as wives. They beat their wives, and, in case of divorce on the fault of the wife, the dower money is paid back to the husband. At the weddings riddles are asked by certain singers called *قوالى*.

*Note.*—This illustrates the old custom (Judges xiv).

Presents are given by the guests to the bridegroom. The bride rides on a horse in procession round the village. Rice, corn, raisins, and cakes are thrown after her. When she enters the house the bridegroom holds

a sword over her, while the guests fire off guns and dance with swords and *Jerids*. The women make *زغليت* or shouts of joy. The girls all weep when the bride enters the house.

The funerals are like those of Moslems. The corpse is perfumed. Swords are carried before it. The coffin is left in the grave—contrary to Moslem custom: it is of wood, and not inscribed. Professional mourners bewail the dead, but not for payment. They wave cloths and handkerchiefs after the coffin like Christians.

*Note.*—I have seen Moslems doing so near Beit Jibrin.

The family mourn from seven to forty days. Sheep are killed, and the guests and poor are fed after a funeral. Cairns are raised over the graves.

Mr. Joseph Jabrail then gives various proverbs, some of which are very pithy and characteristic of the East, but many are to be found in Landberg's "Syrian Proverbs." He repeats some of these as in use among other Syrian nationalities:—

عن الدلف تحت المزراب

"From the gutter under the spout," *i.e.*, "out of the frying pan into the fire."<sup>1</sup>

نصف الدرب ولا كلها

"Half the road and not all," which the informant renders, "Better late than never."<sup>2</sup>

"Does the scribe write himself among the wicked," is suggestive of the East.

كل عذرة تتبع قطيعها

"Every goat belongs to her flock," *i.e.*, "Birds of a feather flock together."

"Ask one who knows, and do not forget the Hakim."

Our informant remarks that they know special names for very few natural objects, *e.g.*, among birds, only the bee-eater, hoopoe, owl, raven, jackdaw, eagle, and a few others, calling all others *صغور* "sparrow," when small, or *طير* when large.

<sup>1</sup> "Landberg," No. xxi—

هرب من تحت الدلف قعد تحت المزراب

He fled from the gutter and sat under the spout.

<sup>2</sup> "Landberg," No. clxxxiii—

نصف درب ولا كلها

The vulgar pronunciation of *Nusf* is *Nuss*.

*Note.*—This agrees with my experience ; only conspicuous or dangerous animals are distinguished by the Syrian peasantry. The remark has considerable philological importance, considering how the origin of race is commonly sought in the distribution of names for fauna and flora.

Science is confined to علم النجوم or astrology. Eclipses are said to be due to a dragon (تنين) eating a piece of the sun or moon.

*Note.*—The common Chinese and Mongol explanation of an eclipse.

### *The Metâwileh.*

The answers begin with a legend of 'Aly descending into a well to fight the Jân, which has no great interest, and continue with another about Muhammad kissing Hasan on the mouth and Hosein on the neck to show that one should die by poison, the other by the sword. The informant gives also the well-known story of Muhammad slaying the Monk Buheirah while drunk. The next story told by the Metâwileh is interesting because it comes from the Apocryphal Gospel of the Infancy (in Arabic, chap. xxxvii), which appears to originate in Persia. It relates that Jesus as a boy was apprenticed to a dyer and dyed all the cloth blue, but gave it to each of the colour he desired. Another, which relates of the weaver who refused to come out to meet Sitti Miriam that he was condemned to be hungry for ever has probably a similar source.

The Metâwileh sing, dance and light lamps at their Makâms. They observe the Moslem feasts. Their Imams are called *Fakih* or persons who can repeat the Korân by heart. They refuse to eat with any not of their own sect, and consider anything touched by an unbeliever impure (instance given). They all observe the Moslem practices and hold the cardinal dogmas.

*Note.*—The Metâwileh inhabit the country east of Sidon and part of Upper Galilee. They are Shi'ah or Persian Moslems, and all that is noted by Mr. Jabrail agrees with the distinctive practices of the Shi'ahs.

The Metâwileh put bread and water as offerings at the tombs of Sheikhs.

*Note.*—I have seen such bread offerings at the 'Ain Eyûb, near Khan Minieh.

At the annual feasts they kill sheep and give to the poor, and present cakes to their neighbours' children, and place flowers on the tombs.

Mr. Joseph Jabrail states that they give names to the days of the week, calling them—

|             |               |     |     |                 |
|-------------|---------------|-----|-----|-----------------|
| Sunday :    | Yôm esh Shems | ... | ... | Day of the Sun. |
| Monday :    | " el Kamr     | ... | ... | " Moon.         |
| Tuesday :   | " el Marikh   | ... | ... | " Mars.         |
| Wednesday : | " 'Atârûd     | ... | ... | " Mercury.      |
| Thursday :  | " el Moshtari | ... | ... | " Jupiter.      |
| Friday :    | " ez Zohrah   | ... | ... | " Venus.        |
| Saturday :  | " Zohal       | ... | ... | " Saturn.       |

They call these planets the سبع كواكب or "seven stars."

*Note.*—This is peculiar. In Syria, generally, the days of the week have no names.

Astrology, علم الابراج is studied, and the expression محبوب نجمة "his star is lucky," is common. They say each man's star is over his head in heaven. They know the Pleiades and the Morning Star, and judge the time of night by the position of the former. They believe comets to portend war and plague, and meteors to indicate war. They are circumcised, and have no images or pictures, regarding all such things as wicked. They have the common Moslem beliefs as to the future, and curse Omar and Abu Bekr.

The Metâwileh are distinguished by a little hair on the forehead, and by the ears, shaving the rest of the head. They wear the Shusheh, or tuft. They only wipe or sponge themselves before prayers, and do not wash like the Sunnis. In prayer they do not adopt the second attitude of the Sunnis, with the hands behind the ears. They carry with them certain sacred stones and sacred earth, and keep these treasures in their houses, with their money and valuables to secure a blessing.

On the tenth of Muharram they rub charcoal on their faces and hands, and begin to weep, beat themselves, rend their clothes, and bewail Hasan and Hosein. They knew of Hosein's Tomb as being at Kerbela (here spelt Kermela).

They bear a bad reputation, and a proverb says—

مثل المتوالي ألف قلبة ولا غلبه

"Like a Metuali, a thousand wriggling and nothing gained." This is the Christian saying.

They are said not to be strict as to conduct, but illegitimate children are rare.

They tie rags to sacred trees when sick and expect to recover. They believe such trees to be haunted by some Neby. They have a rock sacred to Sheikh Hosein, before which lamps are lighted at night—in a village near Sidon. In another village a very large stone is believed to have been carried by Sittna Fatimah, while pregnant.

*Note.*—A similar legend attaches to the great stone at Baalbek in the quarry.

Another story follows of a Metuâli boy who saw Sittna Miriam in his dream. She told him where to dig for water. He discovered a spring, to which the sick were afterwards brought to be cured, Christians as well as Metâwileh.

They believe in spirits living in the water and in dark places. A common curse is **قروء يضربك** "the devil strike you." Other expressions are commonly known, which here follow.

The old women relate stories such as that of Shâtir Hasan, the son of a merchant, who pursued a bird which changed into a girl, and gave her name as Bedr et Temâm, daughter of the King of the Jân. They went to the country of the Jân, where he was recognised as human by his smell, but married the princess.

*Note.*—A version of the wide-spread story of the swan-maiden.

The Metâwileh dance in honour of their saints, arranging themselves in a circle. Their songs are generally war songs, of which a specimen is given. They have been seen dancing round a tree. They have a story that when the Beni Helâl girls used to dance the circle was as far as from Haifa to the Haurân.

They hang to their necks the **خرزة زرقه** or "blue bead," as a charm against the evil eye. They have a pond of sacred fish called Birket 'Ain Tûl. They think it unlucky to pay or borrow money in the morning. They hate the owl, but consider serpents lucky.

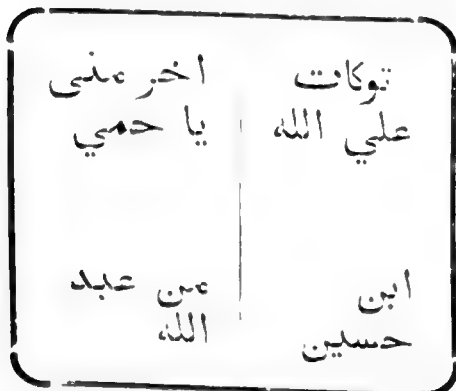
The observations on land tenure contain nothing new. The Metâwileh say that they came from Kesrwân, a district of Lebanon, but they never lived in cities, being agriculturists.

Generally speaking, they have blue eyes and light hair. They have little hair on their faces, and do not shave the head when young as Sunnis do.

Their language is Arabic, differing somewhat from the Christian dialect. Like other peasants they get confused between the Arabic gutturals, except that they distinguish *Alif* and *'Ain*.

Skin diseases are common among them because of their dirtiness. They trust mainly in their sheikhs to cure disease. They apply camomile externally for rheumatism, and use convolvulus as a purgative.

A charm against fever for a boy called Abdallah is given—



"I have rested upon God,  
Away from me, O fever,  
From Abdallah,  
Son of Hosein."

This was kept in a leather purse.

They have a few sayings about plants and flowers, as when the *Kadib er Reii* appears the fellah knows winter is coming (it flowers in September). They say that on the leaves of the sycamore is written "he who falls hence shall never get up again." The infusion of *لسان الثور* ("bull's tongue," a plant), is good for a cough.

Among the Imams some called *Seiyâd* سَيَّيَاد who claim descent from 'Ali, wear green turbans; the rest of the Metâwileh wear white. The rosaries of the Metâwileh have some religious words on them. They practice *Kheirath*, or "choice," by dividing the beads and counting whether odd or even to decide their action. (Instance given where the question was as to whether a medicine was likely to do good.)

The women dance and sing, the men play Mankalah and draughts, also the game *Deris*, which is played by two, each with nine seeds of a colour. The game consists in placing the seeds over numbered places in consecutive rows.

*Note.*—Like our game called "go-bang."

The dowry among the Metâwileh is not returned when the wife is divorced. They say—

اذ المراد زنت حقتا لا يرني

"If the woman has sinned yet her right does not sin." Some marriage customs of interest follow. The friends of the bridegroom after feasting go to demand the bride. Her people bring a large stone, and if his friends can lift it, the bride is allowed to go with them. The bride is pelted as usual, and is carried into the house and a sword held over her. The bridegroom draws a sword or stick over her. Second, and even third or fourth marriages, are said to be allowed.

*Note.*—I think the question may have been misunderstood.

They wash the dead carefully, pare and clean the nails, dress the body, and place charms upon it. Before burial witnesses are brought, and if they say the man was a good man and charitable, this is written on palm leaves buried in the grave. The corpse is perfumed with henna. The procession halts thrice on its way to the grave. The coffin is not left in the grave. Prayers are written on the shroud.

Mr. J. Jibrail gives a sketch of a tomb with the text, "In the name of God the merciful, the pitiful. Has been carried to the mercy of the Most High Hasan Ibn Aly Ahmad, in the year 1200 of the Muhammedans." The mourners eat bread at the grave, and make a feast for the poor. Flowers are grown in sand on the grave and watered.

Several questions have the same answers as among the Druzes. A few proverbs follow :—

"The grasshopper asked for food of the ant." "What were you doing in the summer said the ant." "I was making verses said the grasshopper."

"He comes with one hand in front and one behind."

من لا يخاف من الله خاف منه

"Fear him who does not fear God."

حبل النفاق قصير

"The rope of hypocrisy is short."

الذى ياكل العصى موش مثل الذى بيعدها

"He who gets the stick is not like him who counts it."

See for this proverb Landberg No. cxvii.

يَلِي ياكل العصى موش مثل يَلِي بيعدها

The meaning of one of the others is obscure.

تراب الجورد يطمئها

Said to mean "I have enough for use," lit., "the mud in the hollow suffices."

واحد ايد في النار واحد في مِي

"One hand in the fire and one in the water."

The Metâwileh say the world is flat, and no one knows where the sun goes when it sets. The explanation of earthquake is the common Moslem idea of the bull supporting the earth, who trembles when God looks at him. A fish, *حوت* swallows the sun or moon during an eclipse.

The tambourine, lute, harp, and, according to Mr. Jibrail, the bagpipe, are used by the Metâwileh.

The Seiyids among them claim descent from Hasan and Hosein, and have a right to a tenth of the lands, money, cattle, &c. They own lands also in Paradise and will sell to others. As an instance, a man bought from a Seiyid two yards of Paradise for 500 piastres (£4), but, being poor, wished to have his money back. The Seiyid said the lands of Paradise were not recoverable.

If a woman of the Metâwileh to whom you call, answers *N'am* ("yes") she becomes your wife. The common answer, therefore, is *شو بوك* "What do you want?" It is sinful for a Metuâli to be without a wife, and he hires one for a month or two if he has none.

*Note.*—This connects them with Persia where even the Nestorian Christians make temporary marriages.

The story of a dutiful son of the widow who fell short because he failed to get a new husband for his mother follows.

They say if a girl passes under a rainbow she is changed to a boy, and *rice cersû*. This is also given as a saying of the Bedu. They hang blue glass and pieces of bone to the necks of animals as a defence against the evil eye. The women are specially careful not to show their hair.

*Note.*—Some of these customs approach to those of the Oriental Jews.

### *The Bedu.*

These answers translated by Captain Mantell from the Arabic, contain fewer points of interest, as the informant has evidently not lived among the nomads of the desert, and what he says refer rather to the Fellahin.

A story of Iskander is given. He used to slay the barbers who shaved his head to preserve the secret of his ram's horns. One barber whispered the secret to a well which went on repeating "Iskander has two horns,"

اسكندر له قرنان

*Note.*—Compare the story of Midas which is known to the Kirghiz Tartars.

When a man dies his star falls from heaven. The Arab ordeal by hot water is noticed with another ordeal of standing in a circle drawn round an ant hill. The accused say, "By the truth of the stick (العود) and by the Lord worshipped in the circle of Solomon."

The story of change of sex under the rainbow (قوس القزح or قوس السحاب) is repeated.

Several other proverbs are given—

وجه تعرف ولا وجه تتعرف به

"Know the face and be not known by the face."

رغيف برغيف ولا تخل جارك جوعان

"Loaf for loaf, and do not leave your neighbour hungry."

حبل الكذب قصير

*Note.*—Landberg gives (cxviii)

الرغيف برغيف ولا يذات جارك جوعان

"The rope of lies is short."

بين الحق والبطل اربع اُصابع

"Between truth and error four fingers," said to mean the breadth from the eye to the ear.



*The Christians.*

The answers are somewhat meagre in this section, yet contain points of interest such as the curious legend of Noah gathering the animals to the ark by the sound of the *nakâs* or wooden board used as a bell, and of the cave covered with inscriptions where Daniel once lived. Relics appear to be used, especially bones of St. Antony. New clothes are bought at Easter (a custom in Antioch in the 4th century according to St. Chrysostom). The Makâm of Seiyida el Muntarah has walis which sweat, and this moisture cures the sick. The crow, owl, camel, and wolf are considered unlucky by the Christians. Blue beads are kept with money for luck. Those supposed to be possessed by the devil are bound and kept in churches. Before Easter a child is taken in a coffin round the village to represent the death of Christ; but the Italian representation of the "manger" at Christmas is unknown. Bonfires are lighted at the time of the feast of Holy Cross.

Some Christians have light hair and eyes, which is popularly ascribed to Crusading lineage (no doubt it represents Aryan blood). The priests are supposed to be able to heal the sick by medicines and by written amulets.

The ancient idea that various kinds of food affect the intellect survives among Christians as well as among Moslems. Plain food is thought to improve the memory. Fish is said to weaken the body.

Glass or pottery jars are placed over the door of a house. The cross is marked on the door. Trees and birds are painted on the walls.

At birth a Christian child is rubbed with salt and with oil, and charms hung to its neck (just as in Antioch in the 4th century). The ring is used as well as the crown in marriage both by Greeks and (apparently) by Maronites. The old custom of fighting for the bride survives, and is said to lead sometimes to serious wounds, and even to death of her relatives. The bridegroom rides round the village, and is pelted by the women with cakes, grain, and scent. The old customs seem to be dying out, but the bride is said still to receive a piece of dough which she sticks on the door of the house.

At a funeral hired mourners are still engaged (as in the middle ages), and cloths are waved after the bier. The relatives rend their clothes at the grave, and visit the grave every day for a week (probably a survival of the old idea that the soul haunted the tomb for some time after death).

The belief in magic survives among the Christians, and their ideas as to astronomy are very ancient. They believe the world to be disc-shaped, and they beat drums and fire guns at the time of an eclipse to frighten the dragon who is swallowing the sun or moon.

This is but a *resumé* of the most remarkable points noted. Much valuable information as to peculiar words and expressions, and articles of dress, furniture, &c., is given, with songs and legends, some of which are

already well known; but there are questions concerning which further explanation is very desirable.

*Biblical Illustrations.*

The following Biblical questions are illustrated by these replies :—

1. Worship of the calf and of trees.
2. Forbidden food.
3. Rubbing children with salt.
4. Weighing the hair when cut.
5. Riddles asked at weddings.
6. Hired mourners at funerals.
7. Rending the clothes.
8. Certain proverbs mentioned in the Bible.
9. The use of amulets.
10. Crowns worn by brides.
11. "The corner of the field" left unreaped.

These are, in some cases, not well-known customs as survivals in Syria, and it seems probable that many other interesting notes may be collected by the same method. There was nothing in the questions to lead to the recovery of such illustrations of the Bible in the form of leading questions.

C. R. CONDER.

NOTES BY MAJOR CONDER, D.C.L., R.E.

I.

PALESTINE PEASANT LANGUAGE.

IN "Tent Work in Palestine" I called attention to the importance of studying the local dialects in Palestine, which preserve much that is archaic and which has been lost in the literary language. A good many further notes have accumulated in my hands since then, and a new and most interesting work has been published by C. Landberg, a Swedish scholar, who has given special study to the subject, and whose first volume appeared at Leyden in 1883.

The words commonly used by the Palestine peasantry, and not found in standard dictionaries (such as those of Lane and Freytag), are in many cases the same words used in the Bible or on the Assyrian monuments. Some of these I have noticed previously, others are pointed out by Landberg in his grammatical study of the dialects. The contempt with which the early Arab authors and grammarians regarded the *لسان العامة* or speech of the common people (*עם ה ארץ*), has caused such dialects

to be much neglected by scholars of Semitic languages; and the study is indeed impossible for any student unless he has had the opportunity of living for a good many years among the peasantry of the country.

An instance of the way in which dictionaries may mislead is found in Professor Palmer's translation of the name *Tell el Hâmi Kurseh*, "mound of him who defends the loaf." This is correct from a literary point of view, but makes no good sense. The peasants, however, say *حاميه* for "heater" (see Landberg, p. 182), and the true meaning appears to be "mound of loaf baker." Words used by the peasantry seem in some cases to have been unknown to Professor Palmer in translating the Survey nomenclature, though he possessed considerable knowledge of the dialect, such as *طرس* "a herd," *درس* "an olive mill,"

*ساري* p.n. "a garden with a well," *بيارد* "a kiln," (*طون* for *لطن*) "affable," *بد* "a millstone," *خفر* "a village watchman," *عراق* "cliff" and "cavern," *عريس* "a summer hut," *عزبه* "a pond," *بلوع* "a cliff," (not "bride"), *شقيف* "a stone heap," *سيارد* "pebbles," *صرار* "a gorge," *كوا* "a promontory," *سمورد* "a knoll" (Palmer renders it quite incorrectly "channel"), *خرزد* "well parapet," *نيله* "a bog," *مطابع* "tower" ("palace," among Arabs), *قصر* "a quail," *فرد* "north," *شمال* for *شام* "a wood," *حرش* "narcissus," *سادد* "hill," *شترق* "roller" (bird), *حربس* "hermit's cell," *حنيرد* "water pit," *هددد* "hoopoe," *ناعوس* "the pine tree" (not "Cypress"), *صنوبر* (or *ناوس* more correctly), *عزم* "a heap of corn," *صربوط* "a pillar," *دم* (for *دم*) "blood," *عمر* "a broad path," *قود* "a sheep walk," *منقوش* "speckled," *مات* "death," *خف* "dripping." In most of these cases the standard dictionaries give no assistance, and—as also with many other words—no translation can be considered of any value except that which is founded on personal inquiry from natives made on the spot.

Examples of the value of such study are afforded by the peasant names for birds in Palestine, which in some cases serve, I find, to explain the names of birds mentioned in Assyrian monumental lists, which have presented difficulties to scholars (see Rev. W. Houghton's valuable paper, "Trans. Soc. Bib. Arch.," viii, 1, published in 1884). In Palestine, Mr. G. Armstrong made an interesting collection of birds (see P. E. F. *Quarterly Statement*, October, 1876), including 60 species, and in all cases



Fellahîn and also to the Arabs beyond Jordan. The **יַחְמֹר** or *Yakhmor*, of the Bible (Deut. xiv, 5 ; 1 Kings v, 3) is the English roebuck, as we discovered in 1872. It lives on Carmel, and is called **يَحْمُور** *yahmûr*, by the peasantry. The Arabs call it **حمور** *hamûr*.

I have previously pointed out that the geographical nomenclature of Palestine preserves that of the Old Testament (P. E. F., *Quarterly Statement*, July, 1876, p. 132), and retains also Aramaic words, such as **טירה** (טירד), for a "fenced city," and **בירה** (בירד), for a "fortress" (1 Chron. vi, 39 ; Neh. i, 1), to which I may add **חרש** (Hirsh), for a "wood," still applying to the great wood south of *es Salt*, and representing the Hebrew **חֹרֶשׁ** *choresh*, a "wood." The words **سَد** *sidd*, and **سَاد** *sâdeh*, applied to cliffs, or hill ridges, in Palestine, also represent the Assyrian **סַד** *sadu*, "mountain."

The Aramaic word **דְּרָבָאוֹת** "watch-towers," as I have previously pointed out, survives in the Fellah **ديدبة** applied to ruins of a "watch-tower" on a high hill. The word **مطبع** for a "bog" also retains the meaning of the Hebrew root **טבע** "to sink," as in mud (Psalm ix, 16 ; lxi, 3, 15 ; Jer. xxxviii, 6 ; Lam. ii, 9). I have mentioned a good many other cases in the Memoir nomenclature, and in these cases Professor Palmer has usually adopted my comparison.

In agricultural terms, as has long since been pointed out, the same archaism is observable, as in **جُرن** *jurn*, the common peasant word for a "threshing floor," which is the Hebrew **גֹּרָן** *goran* (Ruth iii, 2 ; Judges vi, 37 ; Num. xviii, 30 ; Isaiah xxi, 10) ; in modern Arabic the word is used only for a "trough," and is so understood by townsmen in Syria. The threshing sledges also (**نُورج** *nûrej*, in common Arabic) is called **مُورج** *mûrej*, by the peasantry, thus reproducing the Hebrew **מֹרַג** *Morag*, for the same instrument (Isaiah xli, 15 ; 2 Sam. xxiv, 22).

The same archaism is also sometimes observable in grammatical forms. Thus the peasantry use **نَحْنَا** *nahna*, instead of **نَحْن** *nahn*, in both feminine and masculine, which approaches the Hebrew **אֲנַחְנוּ** and **נַחְנוּ**, and the Aramaic **אֲנַחְנָא** (Dan. iii, 16, 17 ; Ezra iv, 16). They do not use the old Hebrew **אֲנִי** for the singular, however, but the Aramaic **אֲנִי** (א)---other common grammatical expressions also approach more closely to the Aramaic than to any other Semitic language, as, for instance, the common word **הַיֵּךְ** *hayk*, "thus," which may be compared with the Aramaic **הַיֵּךְ** *haik*, "how" (Dan. x, 17 ; 1 Chr. xiii, 12), also in Samaritan **הַיֵּךְ**

which in Hebrew is אֵימָתָא. The word אֵימָתָא *aimata*, is also commonly used for "when," being the Aramaic אֵימָתָא.

Some of the common peasant confusions between certain letters, and the peasant pronunciation of others show the same connection. Thus the Galileans in the Talmudic age confused נ and ע (Tal Bab Erubin, 53B) as the peasant says قَعَق for قاق and, again, ע with נ, as the peasant says مَحْهָا *mahha*, "with her," for مَعْهָا *m'aha*. The pronunciation of the ז is hardly ever attempted by the peasants, who say either د or ز. Thus for هَذَا *hadha*, "this," we find that in various parts of Palestine, and in different grades of society, the pronunciation is *hada*, or *heida*, or *haza*. In words where the Hebrew *Zain* is represented by the Arabic *dhāl* the pronunciation appears to be generally a *Z*, as in the older language, e.g., أَخَذَ *akhadh*, pronounced *akhaz*, as in the Hebrew אָחַז "he took."

In the same way ث which, like ז is not a letter of the early Semitic alphabet, is not pronounced by the peasantry ; ثَلَاثَا *thalātha*, is the proper pronunciation of the word "three," but in Syria it is pronounced either *talāta* or *salāsa*, the latter being close to the Hebrew שְׁלֹשָׁה "three." The letter ח which is absent from the Moabite Stone and from the Siloam inscription (though found early in Phœnician) is properly the Arabic ط but the peasantry in Palestine not unfrequently confuse this with ت the Hebrew ת, as for instance, in the words تَلَقَّ and طَنُور. The pronunciation is by no means clear in this case, or in the case of ع and س which are similarly confused, not merely in the writing of uneducated natives, but also in actual pronunciation.

The peasantry use the word نحوي *nahwi*, of correct speech (in grammar نحو *nahu*, means "etymology"); and speak of those who speak in correct manner as نحويين *nahwîyin*. They are themselves innocent of any knowledge of the rules of grammar found in books, being unable to read. Their pronunciation is much broader and more vigorous than that of the literary language, or than that of the townsmen. Thus the vulgar pronunciation of ق as *hamza*, so usual in the towns, is not usual in the country, where the sounds *k* and hard *g* stand for this letter. It must be allowed that what the language of books and of schoolmasters may have gained in elegance it has lost in pith and epigrammatic force, as compared with that of the peasantry.

The literary language was a result of the adoption of the Moslem faith. The Korân language was the Arabic of the Hejâz, just as the early Moslem script, which superseded the Syrian alphabets, was the writing used in the Hejâz. The admiration for their sacred work is expressed by the Arab author in the words—

### اشرف اللغات لغة النبي

"The best of words is the word of the Prophet," and hence the Korân grammar and vocabulary became the standards, and remain the Moslem standard of language, though Christian grammarians in Syria never fail to point out that the vulgarisms of Arabia were thereby as much disseminated as were the classic words of Arabic.

El Mukaddasi (as quoted by Landberg) in the tenth century, says—

لا احسن لسانا من اهل بغداد ولا اوحش من لسان صيدا

"The people of Baghdad speak the best, and those of Saida (Sidon) the most barbarously."

His standard was the language which the great grammarians of Baghdad had formed during the palmy days of the Abbas dynasty; while the tongue of Sidon, which he so much despised, probably still retained traces of its Phœnician origin, which the modern philologist would regard as highly important.

The peasant dialects differ considerably in different parts of Palestine, and even in every village—as is usually found the case among illiterate populations. The townsman's pronunciation and vocabulary differs from that of the peasant, and the vocabulary and pronunciation of the desert Arab is again so different that townsmen cannot understand him. Nevertheless, many phrases used by these latter are admired by educated natives, because they approach nearer to classical Arabic, and naturally so, because some of the Eastern tribes are descendants of inhabitants of the Hejâz, who, in some cases (*e.g.*, the 'Adwân), only left Arabia some two centuries ago.

The importance of studying the peasant dialects is therefore very great; and much that the student of the literary tongue will not find in even the most celebrated dictionaries, may be studied among Fellahîn, and Arabs of the desert; just as in our own country the philologist traces the survival, among the peasantry, of ancient words and phrases which have long ago passed out of the ordinary English tongue. For this reason the work of Mr. C. Landberg, who has been almost the first to study this question on the spot with adequate grammatical and philological attainments, promises to be of great interest. In 1883 he published the first volume of his "*Proverbes et Dictons de la Syrie*," including 200 native

proverbs, from the vicinity of Sidon ; and in four more volumes he hopes to treat of all Syria, from Aleppo to Jerusalem, and including the Arab tribes east of Jordan.

The proverbs themselves are of great interest.<sup>1</sup> They show us every side of the peasant character. On the one hand his coarseness, his admiration of the clever liar, his abject submission to tyranny, his hopelessness and cynicism ; but on the other hand also his patience, his wisdom, his compassion for the poor, his high idea of the duties of a neighbour, and his religious faith. The explanations of the proverbs are equally valuable, being in the peasant dialect ; but many of these are taken from Christian sources, and in some cases the real meaning of the proverb itself is not seen.<sup>2</sup> As an instance I would note No. CII—

بَوَسْ أَلْ يَادِي ضَحْكْ عَلَى اللَّحَى  
 “ Kiss the hands laugh at the beards.”

The meaning is perceived by Mr. Landberg, but not clearly explained by the native. In Syria it is considered disgraceful to allow the hand to be kissed. Only the Christian priests allow such a reverence, and the natives laugh at them, and at anyone who allows his hand to be kissed,

“like the curé,” or *مثل القسيس* “like the priest.” زي الخوري Travellers who do not know this, fail to draw away the hand when a native wishes to kiss it, and are consequently laughed at behind their backs—which is the explanation given to Landberg. A Moslem would have reminded him of the ordinary comparison, as to which the Christian was silent.

The confusions between various letters, and the variations of the short vowel sounds, noted by Landberg, are those which the experience of the survey party in collecting nomenclature, and in the daily conversations of six years, made very familiar to me. They are important for comparative purposes, and some have been mentioned already.

<sup>1</sup> They often give words otherwise unknown to scholars of the literary language, *e.g.* (No. C) :—

المدّاومة تقطع خرزة البير

“Perseverance cuts the well wall.” Here the word *خرزد* is seen to mean the round masonry wall of the well. Prof. Palmer renders it “sewing skins.”

<sup>2</sup> Another curious mistake (p. 49) is the translation of *نسناس* *nisnās* “monkeys.” There are no monkeys in Palestine, but the *nims* *نمس* or short-legged ichneumon is so called by the peasantry (*Herpestes Ichneumon*).



|               |               |
|---------------|---------------|
| ا = ع = s     | ز = س = ص     |
| ت = ط = ذ = د | ط = د = ظ = ض |
| ح = ع         | ض = ث = ت = ط |
| د = ذ = ض = ت | ظ = د = ض     |
| ر = ل         | غ = ق         |
| ز = ذ         | ل = ن = ر     |
| ث = ص = ش = س | ن = م         |

In addition to which *ي* is interchangeable at times with *و* as in *جوعان* for *جيعان* (*nahwi جوعان*). The formation of diminutives by inserting *r*, and the quadliterals formed by inserting *n* or *m* into the root, and the frequent use of the *imāla* or *ei* sound for the *alif* are also interesting features of the peasant dialect.

The language is singularly free from foreign words, considering how numerous are the foreign influences. A few Italian words<sup>1</sup> have been brought by traders, and government terms are often Turkish, as are even some of the names for articles of furniture and the like. Persian words also occur, but more particularly among the upper classes. The Fellah seems stolidly to resist all such innovation.

On the other hand, the peasant words, which Mr. Landberg has so carefully studied, are often comparable with Hebrew, Aramaic, and Syriac, and in some instances serve to explain exactly terms which are used in the Old Testament. The following are examples of some interest. In some cases Mr. Landberg has not given a reference to the older languages.

*Beiyen* Fellah, "he saw;" Heb. *בִּין* "he perceived."

*loghz* F., "he murmured;" Heb. *לָעַז* (Psalm cxiv, 1), of a strange language.

*naḍah* F., "it was greasy;" Heb. *נֶצַח* "juice," in Isaiah lxiii, 3-6.

*âid* F., "hand;" Aramaic *אִיד* "hand."

<sup>1</sup> These Italian words belong to the old *Lingua Franca* of commerce. *Bordugân* "orange" (Portugallo), and *Manjeria* "food" (*mangiare* "to eat"), are instances, and the older *Funduk* (see "Syrian Stone Lore," p. 451; Landberg (p. 111) derives *suttif* (سُتِف) from the Italian *stivare*, meaning to "pile up." These words belong, however, rather to the coast towns than to the country.

ferd F., "single, "separate;" Heb. פָּרַד "he separated."

sekker F., "he shut;" Heb. סָכַר and סָגַר "he shut."

l'annij F., "he enticed;" Heb. עֲנִיג "he delighted."

bâr-ah F., "a maiden;" Heb. בָּרָה (Cant. vi, 9, 10).

hutt F., "he worried;" Heb. הָתַת (cf. Psalm lxii, 3), "How long will ye worry a man?"

mâya F., "water;" Heb. מַיָּה

kiriz F., "he proclaimed," is said to be an Aryan word. It occurs in Daniel v, 29 כִּרִּז, and is used in Syriac.

mahbâl F., "idiot;" Heb. הָבֵל "obscurity" (Eccles. vi, 4; xi, 8), the mahbâl is a person of "darkened" intellect.

The work in question contains many interesting statements as to peasant customs, such as that of placing a beetle (خُنْفَس) in a box round a child's neck to ward off the evil eye—clearly a survival of the old scarabeus charm used by Assyrians, and Phoenicians, and Etruscans, as well as by Egyptians. It is remarkable, however, that only one fairy story is given. Such stories are common in the desert, and are read from books by the Syrian upper classes, but my experience led me to think that few, if any, are current among the Fellahîn. That given by Mr. Landberg is probably of Persian origin, and recalls the European tale of the "travelling companion." There are interesting notes, on the other hand, of the survival of the Ashera worship of the Canaanites at Afka and elsewhere in Palestine.

So numerous are the Syrian proverbs that even the 200 given in this volume by no means exhaust them. Many recently received by the P. E. Fund are not enumerated. Proverbs are mentioned in the Old Testament as well as in the New, and some of these have survived among the peasantry. Thus, in Ezekiel xvi, 44, is mentioned a proverb (مَثَل = מִשְׁלַּל) "the daughter is like her mother," which is now

تَطَّلِعُ الْبِنْتُ لَأُمِّهَا

"The daughter springs from her mother."

The proverb in Ezek. xviii, 2, Jer. xxxi, 29, "The fathers have eaten sour grapes, and the childrens' teeth are set on edge," also occurs.

الْبَيَّاتُ يَأْكُلُونَ حَصْرَمَ وَالْأَوْلَادُ يَضْرِبُونَ

The explanation is very remarkable, since it attributes leprosy to neglect of the laws of Levit. xv, 33.

The New Testament maxims, "Judge not," "The mote and the beam," "Measure for measure," also occur in Palestine. This might be thought due to Christian influence, were not such sayings of great antiquity.

The general impression resulting from such study is that the Fellah language is much more a survival of the old Syriac and of the Aramaic spoken in the time of Christ in Palestine, than it is a corruption of the language of the Arabs of Muhammad's days. It is intimately connected with the old speech which we can trace to 1600 B.C. on Egyptian monuments, as spoken in Palestine before the Hebrews arrived with Joshua, and also to the language of Phœnician inscriptions, of the Moabite Stone, and of the Siloam text. Aramaic was still the language of the Rabbis in the 4th century, and Jerome was able before the Moslem Conquest to study in Palestine what he calls "the Canaanite language." (Comm. on Isaiah xix, 18). Cyril also knew it as the common speech of Palestine (*see* "Syrian Stone Lore," p. 314), before the Arabs under Omar arrived.

## II.

### PHœNICIAN NOTES.

Of all the early Semitic peoples, known to us from the monuments, none were nearer to the Hebrews than their immediate neighbours and allies the Phœnicians. It is true that Phœnician population does not appear to have been purely Semitic, for there was, at least among the lower class, an element of population like that usually called Akkadian in Chaldea, and akin to the Hittites in northern Syria; but the kings who have left us religious and funerary texts, wrote in a language closely allied to Hebrew, and in a character closely similar to that of the Moabite Stone, and of the Siloam inscription. I have endeavoured to show (*Quarterly Statement*, January, 1889, p. 21) that the Calendar of Phœnicia was probably the same as the old Hebrew Calendar before the Captivity, which differed from that of the Assyrians; and in many other respects the Phœnician monuments throw light on the social history of the Hebrews, before the conquest of Jerusalem by Nebuchadnezzar.

The Assyrian monuments often present us with notes which show that the differences between the languages of Phœnicia and Chaldea were noted by the writers of Cuneiform. Allusions occur to the "Speech of the western country," and names of gods are given as peculiar to the Phœnicians. Among these *Astarte* is equated with the Akkadian goddess *Istar* (*see* "Proc. Bib. Arch. Soc.," March, 1889), and gives a form closely approaching the *Astar* of the Moabite Stone, which is not of necessity a masculine noun, because it differs from the Hebrew feminine form

*Ashtoreth*. Another Phœnician deity, *Dadu*, mentioned in the same list, is perhaps the *Dodo*, who appears, according to Professors Smend and Socin, on the Moabite Stone (line 12):

“I brought back thence (from Ataroth in Moab) the altar of Dodo.”

A third Phœnician deity in this Cuneiform list is *Malakhum*, whose name Mr. Pinches compares with that of Milcom (the מ and כ being frequently interchangeable): Milcom, or Moloch, being a god of the Ammonites (1 Kings xi, 5, 33; 2 Kings xxiii, 13), as well as of the Phœnicians.

The monuments of Phœnicia are, as a rule, not of very high antiquity, and the use of alphabetic writing itself shows that they are later than the days when hieroglyphics were used in northern Syria for monumental texts. Perhaps the oldest is the much-decayed tombstone of Jehumelek recovered at Gebal, with a bas-relief representing the king adoring Ash-toreth, and generally supposed to date about the 6th century B.C. It is interesting to note that on this monument the common people are described by the same expression, עַם אֶרֶץ,<sup>1</sup> which is used in the Bible (Deut. xxviii, 10) of the non-Israelites; and that a brazen altar was dedicated by Jehumelek to Baalath, recalling Solomon's altar of the same metal.

The celebrated sarcophagus of Eshmunazar, King of Sidon, belongs to a somewhat later period, and has even been supposed later than the time of Alexander the Great. At this time Dora Joppa and the plain of Sharon were claimed as recent conquests of the Sidonians, but the text is principally remarkable for its reference to the Phœnician beliefs as to existence after death. The dead monarch curses those who may disturb his bones, and wishes that they may have “no place of rest among the shades.”

### אל יכו לם משכב את רפאם

The word used (*Repham*) is the same found in the Bible (Isaiah xiv, 10; xxvi, 14, 19) for the *manes*, rendered “deceased,” or “shades,” in the Revised Version.

The position of women in Phœnicia is illustrated by another text from Cyprus, which was erected by a princess in honour of “her lady Ash-torth,” and such votive stones receive on other texts the name מַעֲבָה, which is that used in the Bible for the Canaanite “pillars” (of 2 Sam. xviii, 18; 2 Kings iii, 2, &c., &c.); answering to the Arab *Nush*, a menhir erected in honour of a deity. In another text from Cyprus we find the dignity of “Judge” הַשֹּׁפֵט mentioned by the same word used of the Hebrew Judges; and the “Scribes” סֹפְרִים are noticed in another, in which also we learn that the Phœnician temples had veils like that of

<sup>1</sup> Also used in the Mishnah (Perki Aboth II, 5) where R. Gamaliel says “No common man can be a saint.”

Jerusalem ; while the כַּלְבִּים of a temple text from Larnaca are the same devotees mentioned with abhorrence in Deut. xxiii, 19.

Milcom, the Ammonite deity, was also worshipped in Cyprus, as we learn from the famous Phœnician-Cypriote inscription of Idalia, where his name in Cypriote is spelt *Mi-le-ko-ne*.

The well-known Marseilles tablet shows us how completely the Phœnician priesthood was organised, demanding regulated fees for all its duties, whether of sacrifice, or as diviners or augurs ; the payment being in coins of gold and silver not in kind ; and similar records of fees have been found at Carthage.

Not only bulls, sheep, and goats were offered, but oil or butter even was accepted from the poor, and boughs of fruit trees were hung in the temples. The names for the coins or weights used are the same which occur in the Bible and in the *Mishnah*.

The "hand" which appears on the Phœnician tombstones probably explains the meaning of the term "Absolom's hand" (2 Sam. xviii, 18), used for the monument which he is said to have erected during his lifetime as a memorial. These votive stones have been found in great numbers at Carthage, addressed to deities "because they heard my voice and blessed me," as the inscription usually ends. Some were erected by women as well as by men.

Although the evidence of the Phœnician texts does not carry back their civilisation earlier than the age of the Hebrew monarchies, the bas-reliefs of Egypt show us that it existed even as early as 1600 B.C., or before the Exodus.

Palestine, according to these monuments, was occupied by a mixed population, Semitic and Turanian, which lived in cities, cultivated corn, made wine and oil, had war chariots and fortress walls, was rich in gold and silver, used ivory, precious woods, ebony, and bronze. The Akkadian texts carry back the discovery of bronze to an even earlier age, and the picture of Canaanite civilisation, which we find in Joshua, Judges, and Samuel, is most completely in accord with what is related on the monuments of the trade and wealth of Palestine. Nor was this due only to the influence of Mesopotamia, though the Tell Amarna texts show us close relations between Egypt and the East as early as 1450 B.C. It was a native civilisation of the Hittites, Amorites, and Phœnicians, and it had been spread to Athens and Corinth probably by 1200 B.C.

There is, however, another very interesting result of monumental study in Palestine which is worthy of notice, namely the non-appearance in the Holy Land of those remains of idolatry which are discovered in the immediately surrounding regions.

Northern Syria and Phœnicia have yielded rich collections of statues, amulets, and bas-reliefs, which present figures of gods and demons ; but none such have been found in Palestine. The most southerly monument of the kind (as yet figured) is that which was unearthed at Damascus by Sir C. W. Wilson, though at Gaza terra cottas have been discovered, and gigantic statues of Greek and Roman times in Philistia. The seals as yet

found, which are undoubtedly of Hebrew origin, bear names only, without figures, and the dolmens and standing stones which are so numerous beyond Jordan are not found in Judea or Samaria. Negative evidence is not, it is true, very strong, but it is remarkable that carved figures on rocks have never been discovered as yet south of Kana, near Tyre; and it may perhaps be inferred that the reason is that the injunctions of the Book of Deuteronomy were carried out, and that the idols of the Canaanites were destroyed by the Kings of Judah, as described in the Book of Kings.

### III.

#### HITTITE MONUMENTS.

Near Henâwei, S.E. of Tyre, in Wady el 'Akkâb, there is a group of 15 figures—a deity and 14 worshippers. The men are clothed in short dresses. This monument I have never been able to visit, as I was not in the field when this district was surveyed. It is described by M. Guérin. The fact of the short dress and belts to the figures suggests that it may be of the same class with the so-called "Hittite" processional subjects of Cappadocia. It is said to be much decayed. Exploration might result in the discovery of hieroglyphics.

### IV.

#### THE SOUTH WALL OF JERUSALEM.

In the absence of excavation between the south-west scarp and the Ophel wall, every writer has a right to his own opinion as to the line of this wall. One reason, however, why I think that the line proposed by Mr. St. Clair runs too far north is that there was probably no change between the time of Nehemiah and that of Josephus, whose account is deserving of respect. Josephus says (5 Wars, iv, 2): "after that it went southwards (*πρὸς νότον*), having its bending above (*ὑπερ*), the fountain Siloam, where it bends again towards the east (*πρὸς ανατολήν*), at Solomon's Pool, and reaches as far as a certain place which they called Ophlas, where it joined the eastern cloister of the Temple."

I think the line should run therefore not far from Siloam. This passage identifies pretty clearly the south-east corner of Herod's Temple with the south-east angle of the Haram. Solomon's Pool may be Enrogel (the Virgin's Fountain).

## V.

## NOTES ON NOMENCLATURE.

It might appear from the "Memoirs" that certain places mentioned by M. Guerin are overlooked by the English surveyors, and the following notes seem necessary in explanation. I have looked into all the cases mentioned in the "Memoirs."

Vol. i, page 353. *Tennameh* of Guerin is the *Tinány* of the Survey—a name carefully ascertained.

Vol. ii, page 12. *Dreimeh* of Guerin is the *Dreihemeh* of the Survey—the latter is Arabic, the former is not.

Page 12. *Senjem* of Guerin is the Survey *Sinjib* "squirrel." M. Guerin's word is not Arabic.

Page 122. *Tell er Raian*. The name is not omitted on the Survey. I obtained it standing on the Tell.

*Tell Bâla* appears as *'Ain Bâla* on the Survey Map.

*Tell Asâr* appears to be the Survey *Tell Sârem*.

Page 126. There is no doubt as to the correct spelling of *Shutta*. It was taken from the Government lists.

Page 171. Both the *Bâka's* are mentioned (see page 152) on the Survey.

Page 197. Guerin's *Kafrâr* is the Survey *Jafrân*, *Friâta* is a vulgar pronunciation of *Fer'ata*.

Page 240. Guerin's *Asâr* is the Survey *es Sâr*, but the true name of the site is *es Smeit*.

Page 315. *Deir ed Dham* (Guerin) is the vulgar pronunciation of *Deir en Nidhâm*, as on the Survey (p. 290).

Page 322. Guerin's *Pia* is apparently a printer's error for *Sia*, the name of the site on the Survey. There is no P in the Arabic language.

Page 327. *Ablatah* of Guerin appears to be the Survey *Balâta* (p. 328).

Page 327. *Abu Samâra* of Guerin occupies apparently the site *Mismâr* on the Survey. It is a ruined house (p. 361).

Page 329. *Khurbet Ben Raish* of Guerin seems to be the Survey *Barraish*.

Page 331. *Khurbet Dar Ahmet* is incorrect, as the last word should be *Ahmad*, "Ruin of the House of Ahmad." This is M. Guerin's name for the Survey *Khûrbet er Râs*.

Page 328. *Khûrbet Baenna* of Guerin seems to be the site called *Humîd* on the Survey. The name *Wanneh* occurs further north on the Survey (p. 335) in the same district.

Page 357. *Umm el Hummân*, "mother of the bath," is M. Guerin's name for *Umm el Ikba* of the Survey. *Hummân* is apparently a printer's error for *Hummâm*. The building which he calls a church is a Moslem *Mukâm*.

Page 361. *Merda* is mentioned on the Survey, p. 286.

*Rummon* is described more fully on p. 292.

Page 392. *Wady Amar* of Guerin is the Survey *Wâdy el Hamr*, not *Wâdy Zamâr*. The Survey spelling agrees with that of Robinson and others.

Page 403. *Seirah*, "folds," applies to certain folds which are shown on the Survey.

Page 419. *'Arâk el Deir* is mentioned in the Survey account of *Deir Dubbân*.

Vol. iii, page 8. The subterranean passage of which Guerin heard at Beit 'Atâb is fully described in the "Memoirs" (pp. 23 and 137) as *Bîr el Hasûta*.

Page 264. *'Arâk el Kharab*, "the ruined cavern," is a general name given to caves at Beit Jibrîn by Guerin. The Survey gives 14 names of these caves (p. 266).

Page 275. *Dikkerîn* is the Survey *Dhikkerîn el Boradîn* (p. 258).

Page 321. *'Ain edh Dhirweh*. The ruins mentioned by Guerin are fully described with a plan in the "Memoirs," under the head *Kûsr Islaiyîn* (p. 374).

Page 323. *Hallâl el Bothmeh*, of Guerin, is the Survey *Khallet el Butmeh* (see Map, p. 352). The Survey spelling is correct.

Page 325. *Caphar Barnebo* of Guerin, is a printer's error for *Cuphar Barucha*, the old name of *Beni N'aim* (see p. 304).

Page 352. *Khurbet Beni Dâr*. This is given by Guerin, and is mentioned in the Survey name indexes (p. 398) as another name of *Khûrbet Yukîn*, which is fully described in the Memoir under that name.

Page 369. Guerin's *Terrâma* is evidently the Survey *el Hudab*, p. 329. It does not seem to be an Arabic word.

Page 369. Guerin's *Umm el Amad* appears to be the Survey *Khoreisa* (p. 356), where a ruined church and inscription were found. The previous name only means "mother of pillars."

Page 395. It is a mistake to suppose that there are seven wells at Beersheba; there are only three. Vandevelde never went to Beersheba. His longitude and account show that he went to *el Meshâsh* and mistook it for Beersheba.

These notes may be useful to those who possess the "Memoirs." They represent, I think, all the discrepancies out of 1750 pp. quarto, with lists of 10,000 names, and refer only to insignificant ruins. The Survey nomenclature was tested in various ways, as mentioned in the Introduction, vol. i, of the "Memoirs," and there is apparently no reason to prefer any of the variants proposed by travellers.

## VI.

### THE SPEECH OF LYCAONIA.

In the *Quarterly Statement* I have given already the Carian and Lydian words which appear to be non-Aryan. That Aryan races dwelt in Asia



Minor is, however, shown by the remains of the Lycian and Phrygian languages.

#### PHRYGIAN.

*Bekos*, "bread." Persian *baj*, "food."

*Kimeros*, "chamber." Zend *Kamara*, Armenian *Kamar*.

*Bagaios*, "god." Slav *bogu*, Old Persian *baga*.

Besides the words for "dog," "fire," "water," which Plato says resembled the Greek.

#### LYCIAN.

*Kewe*, "king." Zend *Kavi*, Persian *kai*.

*Gina*, "wife." Armenian *gin*, "wife," Zend *ghena*.

*Ysē*, "if." Zend *iēze*, "if."

*Eveeya*, "this." Old Persian *Haura*, "this."

*Se*, "and." Old Persian *sa*, "and;" Armenian *sd*, "and."

*Goru*, "tomb." Persian *gur*, "tomb;" Armenian *geyreyz*.

*Eveeya*, "these." Old Persian *avahaya* (3rd pers. pl.).

*Meou*, "of me." Old Persian *maiya*, "of me."

Aryan words also occur in the list of words called Lydian by the classic writers, *e.g.* :—

#### LYDIAN.

*Ankōn*, "corner." Armenian *angian*, "corner."

*Brenthion*, "myrrh." Armenian *Badrinch*, "balm."

*Paramene*, "fate" (Feronia). Armenian *veyrin*.

*Kapithe*, "measure." Armenian *Tchap*, "measure."

What is still more interesting, however, is the discovery, to which a comparison of the Armenian and Vannic languages has led me,<sup>1</sup> viz., that the latter is an Aryan tongue akin to Armenian, and comparable also with the monumental Persian and the Zend. Thus in 850 B.C. there were Aryans round Lake Van (of the same race as the Phrygians, as Herodotus tells us), whose Kings were at war with the Hittites, who advanced East from Carchemish. The latter had thus enemies not only of Semitic, but also of Aryan race.

<sup>1</sup> This comparison with Armenian was, however, first proposed in 1872 by Dr. A. D. Mordtmann. It has been denied on grounds which seem to me insufficient by other scholars.

## VII.

WAS THERE A WORD *Ko*, "KING." ?

AMONG points denied by Professor Sayce, was my identification of the sound *Ko* as being a Hittite word for "king." Not indeed the only word, for the terms *Sar*, *Essebu*, *Tarkan*, and *Nazi*, all of which are Turanian terms for king, were also used by the Hittites. I referred the matter to Mr. T. G. Pinches, of the British Museum, and to Mr. G. Bertin, both of whom informed me that the words *Ku* and *Uk* stand for "king" in Akkadian.

In June, 1888, Mr. E. A. W. Budge published a tri-lingual text in Persian, Babylonian, and Susian, of the reign of Darius. The Susian language is a dialect of the Akkadian group, and in the Susian version the word for king is read *Ko* by Mr. Budge. The text is syllabic, and not ideographic, so that the evidence is of value.

In more than one Chinese dialect the word *Chu* or *Chue* stands for "lord." In the old Uigur language (a Turkish dialect) it occurs as *ige*, "lord;" and in the dialect of Eastern Turkestan as *eye*. Among the Yakût (a Siberian Turkic people) it becomes *icee*, and in Uigur *oke* means "honour." It is not known as an Aryan word, but in Zend we have the word *Kavi*, "prince," which in Persian becomes *Kai*, and it is believed that in Lycian (a language very like Zend) *Keue* stood for king. Not only so, but in the Bible itself the word occurs as קִי (Kî), (Ezek. xxiii, 23), according to Gesenius, meaning a prince (as also in the Vulgate, and according to Hebrew interpreters), but it is not a Semitic any more than an Aryan term.

In the Cuneiform syllabaries the sign *Ku* is explained to mean "king" by the Semitic interpreters, and in the Media inscriptions the same sign occurs with the same meaning. There is, as above shown, abundant evidence that the word *Ko* was a widely spread Tartar word for "king," with the radical meaning "high" or "honourable." The sign is of special importance, because it occurs on the only Hittite bi-lingual as yet published, and is one of the distinctive words which, with *Tark* "deer," *Tarku* "chief," *me* "many," *ma* "country," serve to show the Turanian character of the Hittite language. To suppose that a Tartar people spoke either a Semitic or an Aryan language is practically impossible, yet this is the dilemma in which those scholars are placed who call the Hittites "Mongols," yet hesitate to accept their speech as Turanian.

C. R. C.

## THE FORM OF THE MOABITE STONE, AND THE EXTENT OF THE MISSING PARTS.

It is now nearly 21 years since the Moabite Stone was first seen by a European, and the facts connected with its discovery have probably faded from the memory of many. It may be useful to recall them here, in so far as they ought to influence the course of future search.

One is often asked whether the Moabite Stone did not turn out to be a forgery? But those who have watched the course of events know very well that although there was at one time an attempt to palm off upon the world some Moabite pottery, &c., there has never been any serious reason to doubt the genuineness of the Stone of Dhibân, discovered in August, 1868. M. Clermont-Ganneau, in the "Contemporary Review" for August, 1887, very successfully demolished the arguments of an attack which was then recent.

But in the same article M. Ganneau advances the idea that the stone was perhaps twice as large, and the inscription twice as long, as we had supposed it to be, and as the restored form of it shows. On this point it is difficult to agree with him. M. Ganneau has deservedly associated his name with the recovery and the decipherment of the stone; but he did not see it before it was broken to pieces, and he is not the best authority as to the form that it had. The only European who saw the stone before it was shattered was Rev. F. A. Klein, a missionary, who was travelling under the protection of his Arab friend, Zattam, and was taken to see the stone one evening. In the short time at his disposal he made a drawing of the stone, counted 34 lines of writing upon it, endeavoured to collect a perfect alphabet from it, and copied a few words from several lines at random. After this, attempts were made by Dr. Petermann and others to obtain possession of the stone for some European Museum; but the Arabs broke it up, and carried the pieces in different directions, depositing some in their granaries to secure blessings on their corn. Eventually two large pieces were recovered and a number of smaller fragments, making up, as was believed at the time, about seven-tenths of the entire stone. But the absence of the remainder made it difficult to determine the form of the stone in its lower part, for those who sought to do so from the fragments alone, disregarding the sketch made by M. Klein. It was eventually "restored" as a stone rounded at the top but squared at the bottom, and standing on a flat base without a pediment, like a tomb-stone. But M. Klein uttered his protest against this idea. In a letter to the "Academy"<sup>1</sup> he vouches for the perfect correctness of his drawing, since he had made it on the spot. He says, "The stone is, as appears from the accompanying sketch, rounded on *both* sides, not only at the upper end as mentioned by Monsieur Ganneau." And again, "According to my correct measurement on the spot, the stone was

<sup>1</sup> See *Quarterly Statement*, March to June, 1870.

1 mètre 13 centimètres in height, 70 centimètres in breadth, and 35 centimètres in thickness ; and according to my calculation had 34 lines, for the two or three upper lines were very much obliterated. The stone itself was in a *most perfect state of preservation*, not one single piece being broken off, and it was only from great age and exposure to the rain and sun that certain parts, especially the upper and the lower lines, had somewhat suffered."

In accordance with M. Klein's sketch and his testimony, Dr. Ginsburg's "Moabite Stone : a Fac-simile of the Original Inscription," &c., published in 1871, represents the stone as rounded both at top and bottom.

Nevertheless, M. Ganneau retained the opinion that the bottom of the stone was squared ; he "restored" it so, and in that form it stands in the Louvre, in the British Museum cast, and in the photographs. Yet one would think that there was no room to question M. Klein's testimony, and no appeal from his sketch of the stone, made on the spot, and still to be seen in the office of the Palestine Exploration Fund.

It is not an unimportant point ; for intimately connected with the form of the stone is the quantity of writing missing and still to be looked for. M. Ganneau, in the "Contemporary Review," repeats his impression "that the stela must have been of the ordinary shape of Egyptian and Assyrian stele—a block, the upper part rounded, the lower part square," and suggests that the primitive stela may have exceeded 2 mètres in height, and may have contained an inscription double or more in length than which has reached us. Search among the ruins of Dibon might bring to light, he thinks, the other half of the stela, and then the two together would constitute a truly imposing text. Of course, if M. Klein is correct, this is a visionary hope. On the other hand, if the stone was rounded at the bottom, it seems to follow that it did not stand on its own base, nor on any low pediment, but was part of a larger monument. As early as 1873, Mr. Alexander Forbes of Aberdeen, wrote a paper,<sup>1</sup> in which he argues that the nature of the monument in question is indicated in the third line of the inscription, where it is said, "I made this high place for Chemosh." "High place" is here *bomoth*, a sacrificial altar (*see* LXX ; Numbers xxiii, 1) ; and Mr. Forbes thinks it was so splendid and conspicuous a monument as to be well known to the people of Judea, against whom and against whose God it was a proud boast. Isaiah and Jeremiah seem to rebuke the boastfulness and exaggerations of the inscription : "We have heard of the pride of Moab ; he is very proud : even of his haughtiness and his pride and his wrath : but his lies shall not be so" (Isaiah xvi, 6 ; Jeremiah xxix, 30). Instead of making Mesha say, "I set up this stone," as the translators have done, Mr. Forbes would render it—I erected this *altar* (*βωμὸς*). He argues that the stone, being rounded at all its corners, must be regarded as a tablet inserted in a

<sup>1</sup> The paper is printed *in extenso* as an Appendix to W. Pakenham Walsh's "Lectures on the Moabite Stone."

larger building, which building was a *βωμός*; and he suggests that search should be made for the stones which surrounded the tablet.

Is it not further possible that since the altar would stand four-square, like the pediment of the Nelson column, there would be inscribed stones in all the four sides? If so, three more stelæ may await our search.

GEORGE ST. CLAIR.

## THE TELL ES SALAHYEH MONUMENT.

LONG before Professor Sayce published his book on "The Hittites, the Story of a Forgotten Empire," he was looking over some of the Palestine Exploration Fund photographs in my possession, and on coming to the one marked "Tel Salahiyeh, near Damascus, Slab found in the Mound," which is figured on p. 88 of the *Quarterly Statement* for April, he observed, "That is an especially interesting photograph, for it is undoubtedly from a Hittite monument." So that he was then fully aware of the existence of the Hittite monument in question, discovered near Damascus by Sir C. W. Wilson.

A. G. WELD.

I SHOULD like to ask how "the very archaic monument discovered by Sir C. W. Wilson, in his excavations at Tell es Salahiyeh," and supposed by Major Conder to be "Hittite," differs from the one discovered at the same place forty years ago by J. L. Porter, and figured in his 'Five Years in Damascus?' It is there spoken of as "Assyrian." Have two monuments been found in this mound? The two representations (Porter's work just referred to and *Quarterly Statement*, April, page 88) show a striking resemblance to each other.

SELAH MERRILL.

## THE "VIA MARIS."

THE Rev. Charles Druitt wishes to know "how I explain Elijah's direction to his servant in 1 Kings xviii, 43," and "did Elijah mean that his servant was to look north-east across the Acca Bay?"

The first point to consider is, where was the place where Elijah stood when he said to his servant, "Go up now, look towards the sea," and the Bible (verse 42) states that it was on "the top of Carmel." It is beyond doubt that by "the top of Carmel" that place is meant now called "el Muharka" (or el Mahrakah), the burning place, situate on one of the most conspicuous summits of Mount Carmel, which, from its geographical position just above the Kishon River and the Tell el Küssis (the adopted

(Baal) priest's-hill), with its unique view over the whole surrounding country and the sea, in every point answers the biblical description of the Elijah miracle. From this point, the Mediterranean Sea can be seen in two directions, viz., looking south-west and north, between those two views some near heights and the entire range of Carmel intercept the view.

Now Elijah told his servant "*Go up now, look towards the sea,*" which indicates that he went a little forwards on to one of those heights, and considering that all the sudden storms and heavy rains in our neighbourhood come from the west and south-west, I would call the direction whence the rain clouds "*arose out of the sea*" (as seen from el Mahrakah) the west-south-west.

The monks of Mount Carmel have now widened and rebuilt the Chapel on the Mahrakah summit, which, with its whitewashed roof, shines out conspicuously. The traveller coming from Jaffa or Nablûs, from the east of Jordan or Galilee, from Safed, 'Acca, or Tyre, finds this monument on the top of Mount Carmel a guiding point for his journey.

G. SCHUMACHER.

#### NOTE ON A COIN ENGRAVED ON p. 77, *QUARTERLY STATEMENT*, 1889.

A CURIOUS mistake has crept into the paper of Herr G. Schumacher, and has been printed in the *Quarterly Statement* of April this year, p. 77. Describing some ancient objects found in tombs in Galilee, Herr Schumacher says: "Finally they brought me a copper coin found among the dust in a grave, which I reproduce in its natural size and stamp (fig. 17). On one side there are three ears (of corn), tied together with a sling, surrounded by a ring of pearls; the other side shows a sort of purse with tassels and some letters, which I am unable to decipher."

On this I have to remark that the "*ring of pearls*" (which is not given in the plate), is altogether imaginary, and that the "*purse*" is an umbrella, a well-known symbol of royal power. The coin in question, which is by no means uncommon, is no doubt one of Herod Agrippa I., A.D. 37-44, and a similar one will be found engraved on p. 103 in Mr. F. N. Madden's "*History of Jewish Coinage*." London, 1864. Mr. Madden thus correctly describes it: *Obv.* **ΒΑΣΙΛΕΩΣ ΑΓΡΙΠΑ**, *written round an umbrella, surrounded with fringes.*

*Rev.* Three ears of corn springing from one stalk.

G. J. CHESTER.

NOTE ON MR. GUY LE STRANGE'S PAPER ON "ANTIOCH  
IN 1051 A.D.," PAGE 266, *QUARTERLY STATEMENT*,  
OCTOBER, 1888.

The "shell (sadafah) which screens the altar (in the church) of Al Kusyan" is probably an altar screen inlaid with mother-of-pearl, Sadaf being still the word in common use in Syria for mother-of-pearl. The shells are obtained from the Red Sea, chiefly by Bethlehem traders. Mother-of-pearl has long been used in the inlaid work of Syria. There are some fine specimens of mother-of-pearl and tortoiseshell inlaid work in the church of St. James in the Armenian Convent at Jerusalem, and the inlaid pearl work of Damascus is well known. According to Ibn Butlân, the Haikal or Sanctuary of the Church at Antioch appears to have been at the time of his visit (A.D. 1050) screened off from the nave by an inlaid mother-of-pearl screen surmounted by an iron cross, which had been struck in 1050, as he describes, by lightning during the great storm of April 13th (old style—therefore April 25th new style). This is late in the year for a heavy thunderstorm in Syria. He mentions the splitting off of the shell, *i.e.*, pearl inlaying, from the face of the screen, the melting of the silver chain of the censer, and the throwing down of a silver crown which hung before the table of the altar. (It is worthy of notice that the writer throughout speaks of "the table of the altar.")

It is interesting to compare the arrangements here described with those to be found to this day in the Western Syrian churches in Syria and Mesopotamia, and those of the Eastern Syrians (in the Nestorian Mountains)—all have the Haikal or Sanctuary to the east, with its "altar table." In the churches of the Western Syrians the Sanctuary is separated by a vail or curtain which hangs between two pillars. The Eastern Syrians have in their churches a thick wall separating nave from Sanctuary.

Censers are used by both the Eastern and Western Syrians.

Both still have three small tables (called "stools" in Mr. Guy le Strange's translation) at the top of the nave just before the Sanctuary. The Western Syrians use the one at each side (north and south) for the service books, and the middle one for the book of the Old Testament lessons, while beyond it, within the Sanctuary at the top of the step, is a fourth table for the Book of the Gospels. The Western Syrians have two candles placed on the "altar table," which are lighted if there is not daylight enough. These candles must not be made of animal fat, nor must any book bound in the skin of an animal be laid on the "altar table."

The Rev. Dr. Cutts describes the Church of the Eastern Syrians (Nestorians or Assyrians) at Kochanes, where he saw three small tables in front of and below the chancel screen—that on the south for the anthem books, and a rude chandelier, is called the Altar of Prayers; that on

the north is called the Altar of the Gospels, for the Book of the Gospels and a cross laid upon it, and the middle small one has a cross laid upon it.

Ibn Butlân not only gives his dates in Moslem reckoning (of the Hejrah) but also according to the era of Alexander the Great, and I have found that to this day the Syrian Christians use the Macedonian era of Alexander, whose influence was so greatly felt, as well as that of his successors in the provinces of North and Eastern Syria.

The daughter church of St. Thomas' Christians on the Malabar coast also still use the Macedonian era.

It is highly probable that Ibn Butlân (a native of Bagdad) was a member of the ancient Syrian Church, whose home is still in Mesopotamia. The Syrian Christians hold that their Church was founded by the Apostles Paul and Peter—the latter having been their first Bishop and Patriarch. Antioch has long been in ruins; its glories have departed; its gardens, groves, myrtle-heated baths, its countless churches, ornamented with gold and silver and coloured glass, and floors paved in squares (tesserae); its hospital for the sick, and its audit office for the church accounts, where ten or more accountants were kept daily busy—all are gone. First, Greek, and then Moslem invaders drove away the Syrian Christians; next came the Latin Crusading armies, and the final triumph of the Moslem power. Antioch fell, and until lately there were no Christians at all to be found there. There are now a few Greek Christians who live among the Moslem inhabitants; but none of the ancient Syrian Church. Still, though driven away eastwards, the Syrian nation and Church have not ceased to exist. They found a refuge among the highlands of Upper Mesopotamia, whither, to the fortress city of Mardin, the Syrian Patriarch of Antioch removed his seat, and where his successors have to this day cared for their sorely oppressed people. Here, far beyond the ken of ordinary travellers, the Syrian people still speak the ancient Aramaic tongue and keep up their primitive usages and the customs of their Church. The Patriarch, Ignatius Peter III, visited England fourteen years ago at the invitation of the late Archbishop Tait, and was accompanied by Mar Gregorius, Syrian Bishop of Jerusalem. The latter is in England now, having again been invited to this country.

From these Prelates we have derived much valuable information as to the past history and present condition of the Syrian, the oldest Gentile Christian Church in the world. By them, probably for the first time in history, has been used in this country in speaking and in writing the ancient Aramaic as a still living language.

E. A. FINN.



## THE ROCK (SAKHRAH) FOUNDATION OF SOLOMON'S TEMPLE.

Mr. George St. Clair refers (on p. 100 of the April *Quarterly*, 1889) to the now well known Rock summit of Mount Moriah on which Solomon's temple was built, and which is covered by the Dome es Sakhras.

The sight of that grand uncarved Rock drew my attention many years ago, when living at Jerusalem, to the symbolic use of the word Rock in the Old and New Testament, and to the symbolic use of the very different word "*stone*."

The living "Rock" is used in both Old and New Testament as the symbol of the Divine Being, also of his relation as Father to His children while the "*stone*" cut out of the Rock is used as a symbol of sonship (*see* Isaiah li, 1, 2). The use of Rock as a symbol of God, the Divine Father, is clear in Deut. xxxii, 4-15, compared with verses 18, 19, 20.

*Rock* is synonymous with God in 1 Samuel ii, 2 ; 2 Samuel xxii, 3 ; xxiii, 3 ; Psalm xviii, 2 ; xix, 4 ; xxvii, ; lxi, 25 ; lxviii, 35 ; lxxxix, 26 ; xlv, 1 ; Isaiah xvii, 10 ; &c., &c.

That the ancient Hebrews regarded the word "Rock" as a Divine name also appears from the Prayer used during the offering of incense in the Temple (Edersheim's "Temple and its Services," p. 139) : "True it is that Thou, Jehovah, our God and the God of our fathers, our King and the King of our fathers, our Saviour and the Saviour of our fathers, our Maker and the Rock of our salvation, our Helper and our Deliverer, Thy name is from everlasting, and there is no God beside Thee. A new song did they that were delivered sing to Thy name by the sea-shore, together did all praise and own Thee as King, and say, Jehovah shall reign, who saveth Israel."

In order fully to appreciate the force of Deut. xxxii, 18, 19, 20, it is necessary to note the contrast between the Parent Rock צור of verse 18, and the sons, daughters and children of verses 19, 20, for all of which the word בן with its feminine and plural is used ; and to observe the relationship of בן son, and אבן stone with the verb בנה to build. בן in Arabic, in which latter language the noun son commonly retains the initial \ as in the Hebrew אבן, a stone. In Daniel ii, 45, the two words Rock and stone occur. Rock, however, is here in the Chaldee (Aramaic) cognate טור Tûr, so familiar to us as applied to mountains Tor, and in the east Tûr.

This verse of Daniel opens up the deeper meaning and use of the Rock—the Divine Father ; and the Stone, the Son "cut out from the

rock," but not by hands, *i.e.*, without human intervention. We see, in Matthew xvi, that our Lord appropriated to Himself the Rock as the symbol of His Divinity. "Upon this *Rock* will I build my Church," when He accepted the confession of Peter, verse 16. "Thou art the Christ, the Son of the Living God." Peter was a stone אבן--that is, a son בן, but not the Rock צור, the Divine foundation. (See 1 Cor. x, 1.)

Observe here, also, the use of the verb build: "Upon this Rock will I build my Church," and the fuller statements in Hebrews iii, 3-6; Galatians iii, 7, and other passages where our Lord the Master builder is set forth as building His heavenly house (temple) or church of living stones, *i.e.*, sons. The stone אבן is used of the Messiah in His human nature (Genesis xlix, 24). "The stone, the shepherd of Israel" (Psalm cxviii, 22; Mark xxi, 42). "The stone which the builders rejected." I have, in the above, indicated the points contained in the passages referred to, and now briefly mention the subject in its connection with the building of the Temple at Jerusalem upon the foundations of the sacred living Rock.

Upon that unhewn rock was founded the wondrous superstructure; on it stood the concentric walls and courts, all built of hewn stones, let into, grafted, as it were, back again into the parent Rock; symbols of the Sonship granted to Abraham and all his believing children. There were the great stones--symbols of the Patriarchs and Apostles built around and upon the Rock, while the smaller stones representing the great family of spiritual children were used in building up the mighty enclosure walls. Each stone, great or small, was prepared beforehand--each was perfectly formed and fitted to be silently put in its destined place as part of the great whole, closely joined together without mortar or other intervening substance, and compacted perhaps by the action of water into one splendid whole around the glorious head and centre of the Rock on which they were founded.

On some other occasion I hope to notice in fuller detail the many points of extreme interest and importance connected with the use in Holy Scripture of the words "rock," "stone," "son," "builder," and "building," and the closely-connected subject of the Temple on Mount Moriah as a type of the Church, the Temple of living stones built upon the Divine Rock of foundation, of which the great Temple Rock is so impressive a symbol.

E. A. FINX.

ERRATA.

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APRIL "QUARTERLY STATEMENT."—LIST OF SUBSCRIPTIONS.

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*For* General W. Flatt Noble *read* General W. Hatt Noble.

BATH LIST.

*For* Rev. T. P. Methuen *read* Mr. T. Hayes.

On pp. 53 and 65, *for* north-east corner *read* north-west corner.

# LIST OF DONATIONS AND SUBSCRIPTIONS.

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| Leicester            | .. | .. | .. | .. | .. | .. | .. | 0     | 10 | 6  |
| Lichfield            | .. | .. | .. | .. | .. | .. | .. | 3     | 5  | 2  |
| Lincoln              | .. | .. | .. | .. | .. | .. | .. | 1     | 0  | 6  |
| Norwich              | .. | .. | .. | .. | .. | .. | .. | 15    | 15 | 0  |
| Reading              | .. | .. | .. | .. | .. | .. | .. | 8     | 6  | 0  |
| Salisbury            | .. | .. | .. | .. | .. | .. | .. | 1     | 11 | 6  |
| Shrewsbury           | .. | .. | .. | .. | .. | .. | .. | 1     | 1  | 0  |
| Southport            | .. | .. | .. | .. | .. | .. | .. | 4     | 4  | 0  |
| Stroud               | .. | .. | .. | .. | .. | .. | .. | 7     | 7  | 0  |
| Tunbridge Wells      | .. | .. | .. | .. | .. | .. | .. | 4     | 4  | 0  |
| West Kensington Park | .. | .. | .. | .. | .. | .. | .. | 1     | 1  | 0  |
| Worcester            | .. | .. | .. | .. | .. | .. | .. | 1     | 1  | 0  |
| York                 | .. | .. | .. | .. | .. | .. | .. | 0     | 10 | 6  |
|                      |    |    |    |    |    |    |    | <hr/> |    |    |
|                      |    |    |    |    |    |    |    | £182  | 12 | 2  |
|                      |    |    |    |    |    |    |    | <hr/> |    |    |

## LIST OF SUBSCRIPTIONS RECEIVED THROUGH THE HONORARY SECRETARIES.

### ADELAIDE.

REV. WM. ROBY FLETCHER, *Hon. Sec.*

May 27.—By cash .. .. . £10 0s. 0d.

|  |    |    |    |    |    |    |    | £ | s. | d. |
|--|----|----|----|----|----|----|----|---|----|----|
| <i>a</i> Boaz, Rev. A. T., 1887-88       | .. | .. | .. | .. | .. | .. | .. | 1 | 0  | 0  |
| <i>a</i> Cox, Rev. F. W., 1888           | .. | .. | .. | .. | .. | .. | .. | 0 | 10 | 0  |
| <i>a</i> Fletcher, Rev. W. Roby, 1888-89 | .. | .. | .. | .. | .. | .. | .. | 1 | 0  | 0  |
| <i>a</i> Jones, Rev. W., 1888            | .. | .. | .. | .. | .. | .. | .. | 0 | 10 | 0  |
| <i>a</i> Lyall, Mr., 1889                | .. | .. | .. | .. | .. | .. | .. | 0 | 10 | 0  |
| <i>a</i> Lyall, Rev. J., 1889            | .. | .. | .. | .. | .. | .. | .. | 0 | 10 | 0  |
| <i>a</i> Mead, Rev. S., 1888             | .. | .. | .. | .. | .. | .. | .. | 0 | 10 | 6  |
| <i>a</i> Mullens, Mr. Joseph, 1888-89    | .. | .. | .. | .. | .. | .. | .. | 2 | 0  | 0  |
| <i>a</i> Murray, Mr. D., 1888-89..       | .. | .. | .. | .. | .. | .. | .. | 2 | 1  | 6  |
| <i>a</i> Paton, Rev. Dr., 1888-89..      | .. | .. | .. | .. | .. | .. | .. | 1 | 0  | 0  |
| <i>a</i> Rorke, Rev. E., 1888-89         | .. | .. | .. | .. | .. | .. | .. | 1 | 0  | 0  |

# LIST OF SUBSCRIPTIONS.

## BATH.

GENERAL WARREN WALKER, R.E., *Hon. Sec.*

|                  |    |    |    |    | £ | s. | d. |
|------------------|----|----|----|----|---|----|----|
| April 1.—By cash | .. | .. | .. | .. | 4 | 9  | 0  |
| May 1.— do.      | .. | .. | .. | .. | 2 | 2  | 0  |

|                                  |    |    |    |    |    | £ | s. | d. |
|----------------------------------|----|----|----|----|----|---|----|----|
| <i>a</i> Acworth, Rev. C. G.     | .. | .. | .. | .. | .. | 0 | 10 | 6  |
| <i>a</i> Chauntrell, J. D., Esq. | .. | .. | .. | .. | .. | 0 | 10 | 6  |
| <i>a</i> Christie, Mrs. P.       | .. | .. | .. | .. | .. | 1 | 1  | 0  |
| <i>a</i> Headland, Miss          | .. | .. | .. | .. | .. | 0 | 10 | 6  |
| <i>a</i> Pranker, Dr.            | .. | .. | .. | .. | .. | 0 | 10 | 6  |
| <i>a</i> Sendall, Mrs.           | .. | .. | .. | .. | .. | 1 | 1  | 0  |
| <i>a</i> Spring, Mrs.            | .. | .. | .. | .. | .. | 1 | 1  | 0  |
| <i>a</i> Stokes-Shaw, Rev. W.    | .. | .. | .. | .. | .. | 0 | 10 | 6  |
| <i>a</i> Thompson, Mrs. P.       | .. | .. | .. | .. | .. | 0 | 5  | 0  |
| <i>a</i> Winwood, Rev. H. W.     | .. | .. | .. | .. | .. | 0 | 10 | 6  |

## BURNLEY.

ALFRED STRANGE, ESQ., *Hon. Sec.*

|                 |    |    |    |    |    |      |     |
|-----------------|----|----|----|----|----|------|-----|
| June 1.—By cash | .. | .. | .. | .. | £1 | 15s. | 6d. |
|-----------------|----|----|----|----|----|------|-----|

|   |    |    |    |    |    | £ | s. | d. |
|---|----|----|----|----|----|---|----|----|
| <i>a</i> Howorth, Miss, Park View                 | .. | .. | .. | .. | .. | 0 | 10 | 6  |
| <i>a</i> Lancaster, James, Esq., 27, Carlton Road | .. | .. | .. | .. | .. | 0 | 10 | 0  |
| <i>a</i> Lancaster, Wm., Esq., Jun., Morningside  | .. | .. | .. | .. | .. | 0 | 10 | 0  |
| <i>a</i> Stroyan, Mrs., Brunshaw                  | .. | .. | .. | .. | .. | 0 | 5  | 0  |

## CHELTENHAM.

DR. E. T. WILSON, *Hon. Sec.*

|  |    |    |     |     |     |
|--|----|----|-----|-----|-----|
| March 12.—At a Meeting held in the Corn Exchange, Cheltenham,<br>the Rev. Canon Bell, Chairman, Addresses were<br>delivered by Col. Sir Chas. Wilson, K.C.B., K.C.M.G.,<br>F.R.S., D.C.L., R.E., and Major Conder, D.C.L., R.E.<br>Collection, less expenses | .. | .. | £14 | 3s. | 6d. |
|--|----|----|-----|-----|-----|

# LIST OF SUBSCRIPTIONS.

## CHISLEHURST.

REV. F. H. MURRAY, *Hon. Sec.*

|  |    |    |    |    | £ | s. | d. |
|--|----|----|----|----|---|----|----|
| May 21.—By cash                                  | .. | .. | .. | .. | 1 | 1  | 0  |
| April 4.—Do.                                     | .. | .. | .. | .. | 2 | 4  | 6  |
|  |    |    |    |    | £ | s. | d. |
| aMurray, Rev. F. H.                              | .. | .. | .. | .. | 1 | 1  | 0  |
| April 4. — Proceeds of Lecture given by the Rev. |    |    |    |    |   |    |    |
| F. H. Murray                                     | .. | .. | .. | .. | 2 | 4  | 6  |

## DARLINGTON.

J. P. PRITCHETT, Esq., *Hon. Sec.*

|                             |    |    |    |    |     |      |     |
|-----------------------------|----|----|----|----|-----|------|-----|
| June 7.—By cash             | .. | .. | .. | .. | £15 | 10s. | 6d. |
|                             |    |    |    |    | £   | s.   | d.  |
| aPease, Arthur, Esq., M.P., | .. | .. | .. | .. | 10  | 0    | 0   |
| aPease, Mrs. Gurney         | .. | .. | .. | .. | 5   | 0    | 0   |
| aPrideaux, Miss             | .. | .. | .. | .. | 0   | 10   | 6   |

## EDINBURGH.

T. B. JOHNSTON, Esq., F.R.G.S., *Hon. Sec.*

|                  |    |    |    |    |     |     |     |
|------------------|----|----|----|----|-----|-----|-----|
| April 9.—By cash | .. | .. | .. | .. | £80 | 0s. | 0d. |
|------------------|----|----|----|----|-----|-----|-----|

## GREENOCK.

Rev. Dr. MACMILLAN, D.D., LL.D., F.R.S., *Hon. Sec.*

|  |    |    |    |    |    |      |     |
|--|----|----|----|----|----|------|-----|
| April 6.—By cash                         | .. | .. | .. | .. | £3 | 11s. | 0d. |
|  |    |    |    |    | £  | s.   | d.  |
| aBinnie, Robt., Esq., Ashford Gourock    | .. | .. | .. | .. | 2  | 0    | 0   |
| aMacmillan, Rev. Dr., 70, Union Street   | .. | .. | .. | .. | 0  | 10   | 0   |
| aWalker, John W., Esq., 75, Union Street | .. | .. | .. | .. | 1  | 1    | 0   |
| Kindly forwarded by Rev. JAMES BONAR     |    |    |    |    | £2 | 0s.  | 0d. |
|  |    |    |    |    | £  | s.   | d.  |
| aBonar, Rev. J. J., D.D.                 | .. | .. | .. | .. | 1  | 0    | 0   |
| aBonar, Rev. James (1888-89)             | .. | .. | .. | .. | 1  | 0    | 0   |



# LIST OF SUBSCRIPTIONS.

## GUILDFORD.

COLONEL E. H. PASKE, *Hon. Sec.*

April 3.—By cash .. .. . £5 13s. 0d.

|   | £ | s. | d. |
|---|---|----|----|
| <i>a</i> Foord, General .. .. .                   | 0 | 10 | 6  |
| <i>a</i> Laurence, General Sir A., K.C.B. .. .. . | 1 | 1  | 0  |
| <i>a</i> Lawrence, Mrs. .. .. .                   | 1 | 0  | 0  |
| <i>a</i> O'Connell, Mrs. .. .. .                  | 0 | 10 | 6  |
| <i>a</i> Paske, Col. E. H. .. .. .                | 0 | 10 | 0  |
| <i>a</i> Richards, Mrs. Valentine .. .. .         | 0 | 10 | 0  |
| <i>a</i> Shephard, R. J., Esq. .. .. .            | 0 | 10 | 0  |
| <i>a</i> Williamson, W., Esq. .. .. .             | 0 | 10 | 6  |
| <i>a</i> Williamson, D., Esq. .. .. .             | 0 | 10 | 6  |

## HOBART.

MESSRS. J. WALCH & SONS, *Hon. Sec.*

May 15.—By cash .. .. . £0 10s. 6d.

*a*Maum, W. J., Esq. .. .. . £0 10s. 6d.

## HORWICH.

REV. S. F. MAYNARD, *Hon. Sec.*

|                            | £ | s. | d. |
|----------------------------|---|----|----|
| April 15. —By cash .. .. . | 0 | 10 | 6  |
| „ 23. — Do. .. .. .        | 1 | 3  | 6  |
| May 8. — Do. .. .. .       | 1 | 1  | 0  |
| „ 22. — Do. .. .. .        | 1 | 5  | 6  |

|  | £ | s. | d. |
|--|---|----|----|
| <i>a</i> Atkinson, Rev. Canon, Vicarage .. .. .                        | 0 | 10 | 6  |
| Bentley, Mr. S. (don.) .. .. .   | 0 | 2  | 6  |
| Curry, W. J., Esq. (don.) .. .. .                                      | 0 | 2  | 6  |
| Gibbon, Rev. J. H. (don.) .. .. .                                      | 0 | 5  | 0  |
| Holford, J., Esq. (don.) .. .. .                                       | 0 | 2  | 6  |
| Hollifield, E. J., Esq. (don.) .. .. .                                 | 0 | 5  | 0  |
| <i>a</i> Holmes, Thomas, Esq., Ellerslie, Seymour Road, Bolton .. .. . | 0 | 10 | 6  |
| <i>a</i> Lowe, Rev. Chas., Holy Trinity Vicarage, Bolton .. .. .       | 0 | 10 | 6  |
| <i>a</i> Oldfield, Rev. E., Norwood House .. .. .                      | 0 | 10 | 6  |
| <i>a</i> Sheppard, Rev. Samuel, Wingates Rectory .. .. .               | 0 | 10 | 6  |
| <i>a</i> Varley, Wm. Mason, Esq. .. .. .                               | 0 | 10 | 6  |

# LIST OF SUBSCRIPTIONS.

## LEAMINGTON.

REV. J. W. JOHNSON, *Hon. Sec.*

May 7.—By cash .. .. £1 11s. 6d.

|                              |    |    |    |    |    |    | £ | s. | d. |
|------------------------------|----|----|----|----|----|----|---|----|----|
| <i>a</i> Brandt, Miss        | .. | .. | .. | .. | .. | .. | 0 | 10 | 6  |
| <i>a</i> Gotto, Miss..       | .. | .. | .. | .. | .. | .. | 0 | 10 | 6  |
| <i>a</i> Johnson, Rev. J. W. | .. | .. | .. | .. | .. | .. | 0 | 10 | 6  |

## LEEDS.

A. KEMP BROWN, Esq., B.A., *Hon. Sec.*

April 9.—By cash .. .. £0 10s. 6d.

*a*Scatcherd, Mrs., East Keswick .. .. £0 10s. 6d.

## LEICESTER.

REV. A. A. ISAACS, M.A., *Hon. Sec.*

May 1.—By cash .. .. £0 10s. 6d.

*a*Isaacs, Rev. A. A. .. .. £0 10s. 6d.

## LICHFIELD.

HENRY M. MORGAN, Esq., *Hon. Sec.*

March 29.—By cash .. .. £3 5s. 2d.

|   |    |    |    |    |    |    | £ | s. | d. |
|---|----|----|----|----|----|----|---|----|----|
| <i>a</i> Graham, Rev. J. (1888–89), Beacon Street | .. | .. | .. | .. | .. | .. | 1 | 0  | 0  |
| <i>a</i> Gresley, Mrs., The Close ..              | .. | .. | .. | .. | .. | .. | 0 | 10 | 0  |
| <i>a</i> Hinckley, F. Esq., Netherstone ..        | .. | .. | .. | .. | .. | .. | 0 | 10 | 0  |
| <i>a</i> Morgan, H. M. Esq. ..                    | .. | .. | .. | .. | .. | .. | 0 | 10 | 6  |
| <i>a</i> Poole, Rev. G., Esq., Hammerwich         | .. | .. | .. | .. | .. | .. | 0 | 5  | 0  |
| <i>a</i> Richardson, Mr., Station Road ..         | .. | .. | .. | .. | .. | .. | 0 | 10 | 6  |

# LIST OF SUBSCRIPTIONS.

## LINCOLN.

REV. CANON HECTOR NELSON, *Hon. Sec.*

May 16.—By cash .. .. £1 0s. 6d.

|                        |    |    |    |    |    | £ | s. | d. |
|------------------------|----|----|----|----|----|---|----|----|
| aSt. Leger, Miss Edith | .. | .. | .. | .. | .. | 0 | 10 | 6  |
| aTownroe, Rev. J. W.   | .. | .. | .. | .. | .. | 0 | 10 | 0  |

## NORWICH.

REV. W. F. CREENY, *Hon. Sec.*

June 8.—By cash.. .. £15 15s. 0d.

|                                     |    |    |    |    |    | £ | s. | d. |
|-------------------------------------|----|----|----|----|----|---|----|----|
| aBarrett, Rev. G. S.                | .. | .. | .. | .. | .. | 1 | 1  | 0  |
| aCreeny, Rev. W. F.                 | .. | .. | .. | .. | .. | 0 | 10 | 6  |
| aCrookshank, Rev. G. A.             | .. | .. | .. | .. | .. | 0 | 10 | 6  |
| aDavies, Rev. Alfred                | .. | .. | .. | .. | .. | 0 | 10 | 6  |
| aDix, Mrs. ..                       | .. | .. | .. | .. | .. | 0 | 10 | 6  |
| aGilman, C. R., Esq.                | .. | .. | .. | .. | .. | 1 | 1  | 0  |
| aHarvey, E. K., Esq.                | .. | .. | .. | .. | .. | 1 | 1  | 0  |
| aHildyard, Rev. F...                | .. | .. | .. | .. | .. | 1 | 1  | 0  |
| aHinds-Howell, Rev. Canon           | .. | .. | .. | .. | .. | 0 | 10 | 6  |
| aHudson, Rev. W...                  | .. | .. | .. | .. | .. | 2 | 2  | 0  |
| aKennion, Rev. R. W.                | .. | .. | .. | .. | .. | 1 | 1  | 0  |
| aNorfolk and Norwich Library        | .. | .. | .. | .. | .. | 0 | 10 | 6  |
| aNorwich, The Very Rev. the Dean of | .. | .. | .. | .. | .. | 2 | 2  | 0  |
| aPatteson, H. S., Esq.              | .. | .. | .. | .. | .. | 1 | 1  | 0  |
| aRipley, Rev. W. N.                 | .. | .. | .. | .. | .. | 2 | 2  | 0  |

## READING.

REV. W. BUTLER, *Hon. Sec.*

April 11.—By cash .. .. £8 6s. 0d.

|                        |    |    |    |    |    | £ | s. | d. |
|------------------------|----|----|----|----|----|---|----|----|
| aBourke, Rev. C. T. J. | .. | .. | .. | .. | .. | 0 | 10 | 6  |
| aBrown, Miss ..        | .. | .. | .. | .. | .. | 0 | 10 | 6  |
| aButler, Mrs. Mary     | .. | .. | .. | .. | .. | 1 | 1  | 0  |
| aCatchpool, Mr. R. D.  | .. | .. | .. | .. | .. | 0 | 10 | 6  |
| aGarry, Rev. Canon     | .. | .. | .. | .. | .. | 0 | 10 | 6  |
| aHeelas, John, Esq.    | .. | .. | .. | .. | .. | 1 | 1  | 0  |
| aMonck, J. Bligh, Esq. | .. | .. | .. | .. | .. | 1 | 1  | 0  |
| aPapillon, Major ..    | .. | .. | .. | .. | .. | 0 | 10 | 6  |
| aPhilbrick, Messrs.    | .. | .. | .. | .. | .. | 0 | 10 | 6  |
| aSutton, Alfred, Esq.  | .. | .. | .. | .. | .. | 1 | 0  | 0  |
| aWilliams, Mrs. F. E.  | .. | .. | .. | .. | .. | 1 | 0  | 0  |

# LIST OF SUBSCRIPTIONS.

## SALISBURY.

J. LARDNER GREEN, Esq., M.R.C.S., F. R. Met. Soc., *Hon. Sec.*

|           |         |    |    |    | £ | s. | d. |
|-----------|---------|----|----|----|---|----|----|
| April 9.— | By cash | .. | .. | .. | 0 | 10 | 6  |
| May 10.   | Do.     | .. | .. | .. | 1 | 1  | 0  |

|                                  |    |    |    |    | £ | s. | d. |
|----------------------------------|----|----|----|----|---|----|----|
| <i>a</i> Green, J. Lardner, Esq. | .. | .. | .. | .. | 0 | 10 | 6  |
| <i>a</i> Hutchings, Rev. Canon   | .. | .. | .. | .. | 1 | 1  | 0  |

## SHREWSBURY.

REV. C. H. DRINKWATER, *Hon. Sec.*

|            |         |    |    |    | £ | s. | d. |
|------------|---------|----|----|----|---|----|----|
| March 26.— | By cash | .. | .. | .. | 0 | 10 | 6  |
| May 1.—    | Do.     | .. | .. | .. | 0 | 10 | 6  |

|  |    |    |    |    | £ | s. | d. |
|--|----|----|----|----|---|----|----|
| <i>a</i> Niecols, Miss, 13, Abbey Foregate | .. | .. | .. | .. | 0 | 10 | 6  |
| <i>a</i> Parry, Mrs. Bertha, 10, Swan Hill | .. | .. | .. | .. | 0 | 10 | 6  |

## SOUTHPORT.

MR. ROBERT PENTY, *Hon. Sec.*

|           |         |    |    |    |    |     |     |
|-----------|---------|----|----|----|----|-----|-----|
| June 12.— | By cash | .. | .. | .. | £4 | 4s. | 0d. |
|-----------|---------|----|----|----|----|-----|-----|

|   |    |    |    |    | £ | s. | d. |
|---|----|----|----|----|---|----|----|
| <i>a</i> Atkinson Free Library, per Mr. T. Newman | .. | .. | .. | .. | 0 | 10 | 6  |
| <i>a</i> Barnes, Miss, 65, Albert Road            | .. | .. | .. | .. | 1 | 1  | 0  |
| <i>a</i> Clay, Mrs., 35, Alexandra Road..         | .. | .. | .. | .. | 1 | 1  | 0  |
| <i>a</i> Penty, Mr. R., 44, Linaker Street        | .. | .. | .. | .. | 0 | 10 | 6  |
| <i>a</i> Watkinson, Mr., 9, Union Street          | .. | .. | .. | .. | 0 | 10 | 6  |
| <i>a</i> Whitworth, Mr. J., 88, Portland Street   | .. | .. | .. | .. | 0 | 10 | 6  |

## STROUD.

T. S. OSBORNE, Esq., *Hon. Sec.*

|          |         |    |    |    |    |     |     |
|----------|---------|----|----|----|----|-----|-----|
| June 8.— | By cash | .. | .. | .. | £7 | 7s. | 0d. |
|----------|---------|----|----|----|----|-----|-----|

|  |    |    |    |    | £ | s. | d. |
|--|----|----|----|----|---|----|----|
| <i>a</i> Carpenter, J. H., Esq., Cainscross        | .. | .. | .. | .. | 0 | 10 | 6  |
| <i>a</i> D'Ombraïn, Rev. H., Vicar of Stroud       | .. | .. | .. | .. | 0 | 10 | 6  |
| <i>a</i> Evans, Arthur, Esq., Hillsdon, Brimscombe | .. | .. | .. | .. | 1 | 1  | 0  |
| <i>a</i> Evans, Edward, Esq., Brimscombe Court     | .. | .. | .. | .. | 1 | 1  | 0  |
| <i>a</i> Fisher, W. H. C., Esq., Roweroft          | .. | .. | .. | .. | 0 | 10 | 6  |
| <i>a</i> Harper, James, Esq., Ebley                | .. | .. | .. | .. | 0 | 10 | 6  |
| <i>a</i> Lancaster, Thomas, Esq., Bownham House    | .. | .. | .. | .. | 1 | 1  | 0  |
| <i>a</i> Marling, Sir W. H., Bart., Stanley Park   | .. | .. | .. | .. | 1 | 1  | 0  |
| <i>a</i> Osborne, T. S., Esq., Lower Street        | .. | .. | .. | .. | 0 | 10 | 6  |
| <i>a</i> Strange, S. M., Esq., 23, High Street     | .. | .. | .. | .. | 0 | 10 | 6  |

# LIST OF SUBSCRIPTIONS.

## TUNBRIDGE WELLS.

REV. J. H. TOWNSEND, *Hon. Sec.*

|                  |    |    |    |    |   |    |    |
|------------------|----|----|----|----|---|----|----|
| April 9.—By cash | .. | .. | .. | .. | £ | s. | d. |
| May 29.—Do.      | .. | .. | .. | .. | 1 | 11 | 6  |
|                  |    |    |    |    | 2 | 12 | 6  |

|   |    |    |    |    |   |    |    |
|---|----|----|----|----|---|----|----|
|   |    |    |    |    | £ | s. | d. |
| aDouglas, Thos., Esq., Greenwood, Frant       | .. | .. |    |    | 0 | 10 | 6  |
| aFox, Mrs., Oakleigh                          | .. | .. | .. | .. | 0 | 10 | 6  |
| aKington, Colonel, Charlton Lodge             | .. | .. |    |    | 0 | 10 | 6  |
| aRead, Rev. T. F. Rudston, Withingham Rectory | .. |    |    |    | 1 | 1  | 0  |
| aTownsend, Rev. J. H., Herne Lodge            | .. | .. |    |    | 0 | 10 | 6  |
| aWaterlow, Mrs., Broadwater, Bury             | .. | .. |    |    | 1 | 1  | 0  |

## WEST KENSINGTON PARK.

REV. THOMAS HARRISON, *Hon. Sec.*

|                   |    |    |    |    |    |     |     |
|-------------------|----|----|----|----|----|-----|-----|
| March 26.—By cash | .. | .. | .. | .. | £1 | 1s. | 0d. |
|-------------------|----|----|----|----|----|-----|-----|

|                       |    |    |    |    |   |    |    |
|-----------------------|----|----|----|----|---|----|----|
|                       |    |    |    |    | £ | s. | d. |
| aHarrison, Rev. Thos. | .. | .. | .. | .. | 0 | 10 | 6  |
| aPitts, Fred., Esq.   | .. | .. | .. | .. | 0 | 10 | 6  |

## WORCESTER.

REV. FRANCIS J. ELD, *Hon. Sec.*

|                 |    |    |    |    |    |     |     |
|-----------------|----|----|----|----|----|-----|-----|
| May 28.—By cash | .. | .. | .. | .. | £1 | 1s. | 0d. |
|-----------------|----|----|----|----|----|-----|-----|

|                       |    |    |    |    |    |     |     |
|-----------------------|----|----|----|----|----|-----|-----|
| aEld, Rev. Francis J. | .. | .. | .. | .. | £1 | 1s. | 0d. |
|-----------------------|----|----|----|----|----|-----|-----|

## YORK.

H. M. PLATMANER, Esq., *Hon. Sec.*

|                   |    |    |    |    |    |      |     |
|-------------------|----|----|----|----|----|------|-----|
| April 16.—By Cash | .. | .. | .. | .. | £0 | 10s. | 6d. |
|-------------------|----|----|----|----|----|------|-----|

|                         |    |    |    |    |    |      |     |
|-------------------------|----|----|----|----|----|------|-----|
| aPlatmaner, H. M., Esq. | .. | .. | .. | .. | £0 | 10s. | 6d. |
|-------------------------|----|----|----|----|----|------|-----|

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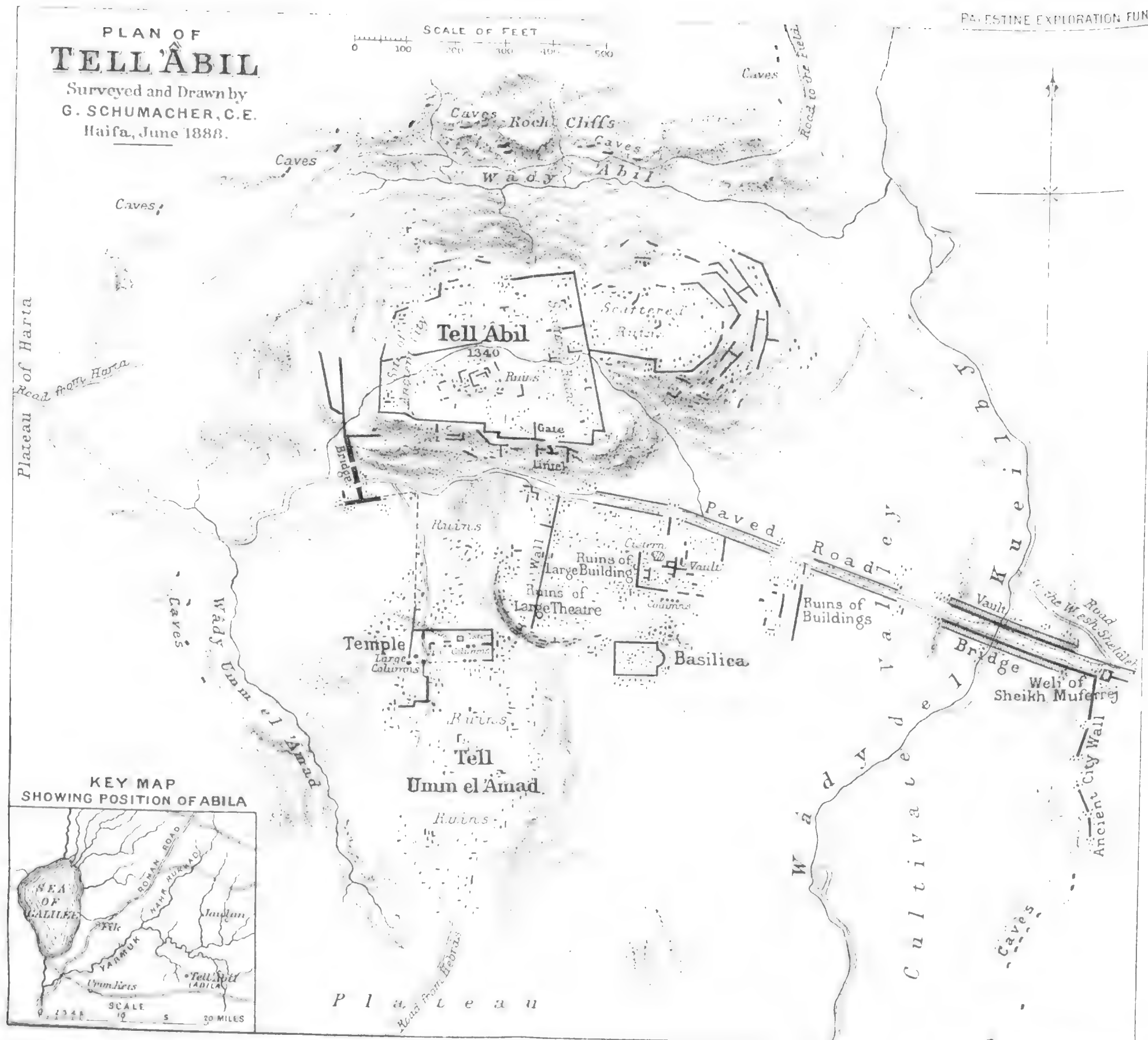
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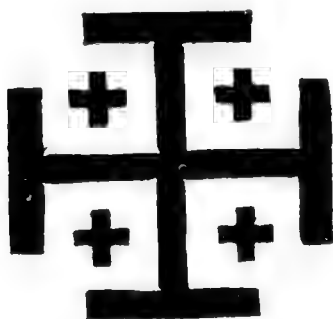
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## P R E F A C E.

---

AT the request of the Committee of the Palestine Exploration Fund, I have undertaken to see the account of my friend Herr Schumacher's survey of the ruins of Âbil through the press, and make such modifications of idiom as were needful to render the descriptions clear. Except for this, I have made as little alteration as possible, considering that Herr Schumacher's own words would best describe the interesting ruins of Abila of the Decapolis, of which he is the first explorer to publish plans and drawings.

The Arabic names are printed as Herr Schumacher has written them, and give the present—rather than the classical—orthography.

The illustrations have all been engraved expressly for the present publication from the drawings and plans sent home by Herr Schumacher. They will

enable the reader to form a clear idea of one of the many interesting sites in the country east of the Jordan, which is so rarely visited.

The ruins were evidently of very considerable extent, and show the remains of buildings that must have boasted originally no inconsiderable architectural splendour. History takes little count of the town of Abila of the Decapolis—some half dozen incidental references are the most that can be found; but Herr Schumacher's description and drawings of Temple, Theatre, and Basilica are again proof, if need were, of the many wonderful remains of lost cities which still await the explorer in the fertile upland regions of the country across the Jordan.

GUY LE STRANGE.

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# ABILA

OF THE

## DECAPO LIS.

---

LAST February I again found opportunity to visit the high Plateau of Haurân, and took my way by Tiberias, round the south end of the lake, and up the steep road Darb el-Akabeh to Kefr Hârib and Fik, the westernmost villages of the Haurân. The country was everywhere dried up, and the green along the road poor, a result of the little rain that had fallen this winter. The seeds had hardly sprouted, and it was with sorrowful forebodings that the Haurân Fellah looked forward to the coming crops. Large parcels of land had remained untilled, hardly a plough-share had been driven across the fields to prepare the soil for the 'seify' or summer sowing. The cattle, from the want of pasture, were already in a miserable state, and the natural watering-basins throughout Haurân were

already nearly dry. At Kefr el-Ma, where we passed the night, the youth of the village were just setting out in procession, walking arm in arm, the young girls following behind the young men, marching in rank, striking old petroleum cans the while, and shouting and crying in every possible melody, praying for rain. Now and again a miserable old Fellah would pour a quantity of water over a row of the boys and these immediately would cover their heads with the 'aba' or mantle, and rushing through the streets, cried 'Shitâ, shitâ!' (rain, rain). This symbolic joy fortunately soon became a reality, for a week later the clouds poured down their sources of blessing over the thirsty land, and the dearth and drought were remedied.

Next day I pushed further eastwards, taking my way from Kefr el-Ma, not through the wild gorge of the Rukkâd, but straight to the bridge of Jisr er-Rukkâd, through a most stony, rough country, covered with basalt masses. Here and there along the small Wâd el-Mu'akkar (a wady running east and west from Tell el-Mu'akkar—see map of 'Jaulân') springs gush out among the black lava rocks and produce a fresh oasis in this dry country. Leaving to the right the ruin El-Murujeh, a large heap of stones, with traces of strong walls and the remains of some modern huts, we cross to the Rukkâd at the bridge just mentioned. The wady bed is not deep here, the stream being about 15 feet across and one foot deep,

tumbling over the gigantic basalt blocks down to the first cataract, a couple of hundred yards below the Jisr.

From here we proceeded through the marshy ground surrounding 'Ain Dakar, and across the dolmen field of that neighbourhood. To our surprise we found every now and again that a dolmen had been turned over, and especially the large covering slabs were thrown down, and the dolmen interiors dug up. On inquiry in the matter, we learnt that the Fellahîn and Bedawîn, after my repeated visits to the place and investigations of these monuments, had come to the conclusion that I was looking for treasure among the 'Kubûr Beni Isrâil,' and, therefore, they also had tried their luck in investigating the interiors with hoe and hands. But whether any 'kens' (treasure) had been found, I could not discover.

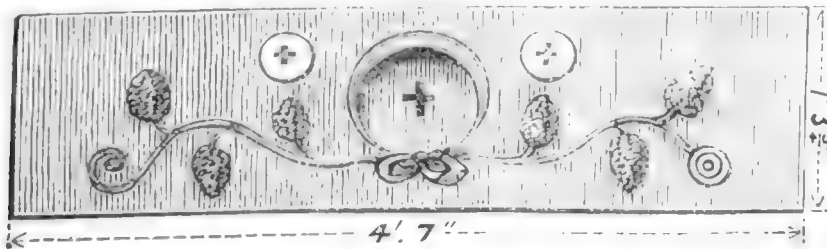
Following the Roman road coming from the country west of the Rukkâd, and crossing the plateau between Tsîl and 'Adwân, we reached the so-called capital of Haurân, Sheikh Sa'ad, in the latter part of the same afternoon. The Merkez, or seat of government, was but little changed since my last visit in 1884 and 1885. The sùk (market) has improved, and here and there a house for the Government officials had been erected; a sort of inn also had been built. Next to this stood a large khan and dry-goods store, held by a Damascus merchant, who willingly took us to look

at his property. Among liquors and dainties that were the products of Damascus, I discovered some canned provisions, and amongst the rest some tinned lobsters. Some of these latter I took with me as a curiosity, proving that civilization had found its way even into the heart of Haurân to this degree. But, alas! when the can was opened next day near Mzeirîb, its contents had quickly to be consigned to the floods of the holy lake of Bajjeh!

The Mutasarrîf, or Governor, of Haurân was absent in the 'Jebel,' to collect the taxes from the hostile Druses, and look out for a suitable site for a Government colony near the Lejjâ at Busr el-Harîry; for, in view of the continual quarrels between Druses and Bedawîn, the Government had at last decided to erect a strong place there, from which both peoples could be controlled and, in case of need, brought into subjection by the strong arm of military authority.

After concluding my official business with the Acting Governor, I strolled through the Government building, which is in a state of decay, as nothing is ever mended or looked after. The 'livân,' or corridor, in front of the room where the 'Mejlis Idâra' (Administrative Council) was in full session, was, I now discovered, built on the foundations of an ancient apse, while the room itself was in part formed from the aisles of a Christian Church that had in former times belonged to the great convent of Job (*see*

'Across the Jordan,' p. 188 ff). The main axis of the church ran nearly due north and south. In the walls of the modern building, the many ancient crosses had been generally destroyed by fanatic hands. In the opposite wing, the southern part of the Merkez, the lintel ornament given below (the crosses somewhat defaced) was masoned into the wall.



Ornamental Lintel at Merkez.

From Sheikh Sa'ad we started next morning southwards towards 'Ajlûn. At Mzeirib we made our first halt near the Government flour mill. In addition to what I have said on pages 27 and 28 in 'Across the Jordan,' I may add that I further discovered on the east bank of the Bahret el-Bajjeh, a thermal spring, about 100 yards south of the mill there mentioned. The water is sweet, but had a temperature of 28° C. (84° F.), while the lake itself had but 24° C. (75° F.) The village and market (Ed Dukkakîn) is becoming less and less inhabited, the feverish climate of the place contributing greatly to its falling into ruin.

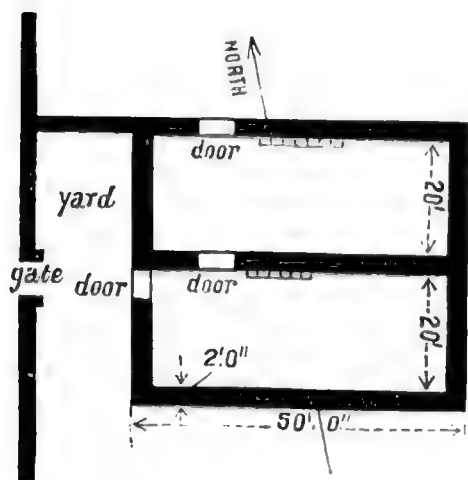
From Mzeirîb we turned westwards to Tell esh

Shehâb, and without entering that populous village, descended the slopes of the Wâd el-Meddan (*see* map). The slopes and bed of this large wâdy are formed by a soft crumbling white limestone ; the road winds along the precipices and finally crosses the bed at a place where the stream is, at this season, hardly flowing, though forming here and there basins of water, full of fish. The heaps of basalt blocks and *débris* lying about in the wâdy bed, however, prove that this stream, coming from the interior of Haurân, is very powerful after a rainfall. We climbed the southern bank and reached a fertile, well-cultivated, and nearly stoneless plateau, and then rode across it in a western direction for about two miles. We afterwards crossed the small dry Wâdy Shômar (شومر). Nowhere in this plateau were there any stones. The soil of this region lies in very deep layers, as may be seen from the wâdy bed, and is said to be most fertile. With a short bend northwards we reached 'Amrâwah (عمرأود). The village contains about 40 huts, generally built of mud, few stones being used, as the Sheikh has built up all the old remains into his own dwelling. The village lies on a parcel of ground that is slightly elevated above the surrounding plateau. It has a poor appearance, but has splendid soil all round it. The drinking water is brought from near the Wâd Tell Shehâb. We tied our horses in the courtyard of the Sheikh's dwelling,

while our zaptich (soldier) went to seek the Sheikh among the villagers. Meanwhile carpets were spread in the 'madâf' (also called 'menzûl'), or room for guests the 'nukra,' or fireplace, was cleansed, wood for fuel brought, and the coffee cans rinsed and prepared. Meantime Sheikh Jeber arrived, bid us welcome and sat down beside us. He was an old but well-fed and pleasant-looking Fellah, half blind, but still very active. After inquiring, as usual, our health and our doings, he soon began to give us a long account of his life and adventures in Haurân. He had risen from being a common Fellah of Tuffas, in Haurân, to the post of Sheikh here, having expropriated land while 'Amrâwah was yet a ruin and the state of things in Haurân quite unsettled; and after long and bloody skirmishes with the Bedawîn, had ended by having his land 'registered,' and now calls the rich village his own property, while all the inhabitants are his 'haratîn' or 'ploughers.'

I several times made the attempt of inquiring into the position of Âbil, but he always avoided the question. Coffee was passed round once or twice, cigarettes and pipes smoked, the room began to be crowded with his subordinates, but my questions remained unanswered. At last I remarked on the ancient remains of capitals, columns, and ornaments I saw lying about in his yard, and asked where they came from. 'Oh,' replied he, 'they come from your

fathers, and I will show you still more of them.' He rose and led us to an ancient building, roofed with basaltic slabs, as is usual in the old Haurân architecture, which he had made into a stable and straw barn. 'This is my grain magazine, friends,' he continued; 'formerly it was called "Khân es-Sultany," *خان السلطاني* (the Imperial Khân), and now it is called "Khân Jeber."' He concluded with a chuckle. This Khân has a length of about 50 feet, and is divided into two equal sized rooms, each 20 feet wide and about 15 feet high, connected by a door. The masonry is very carefully executed. Large



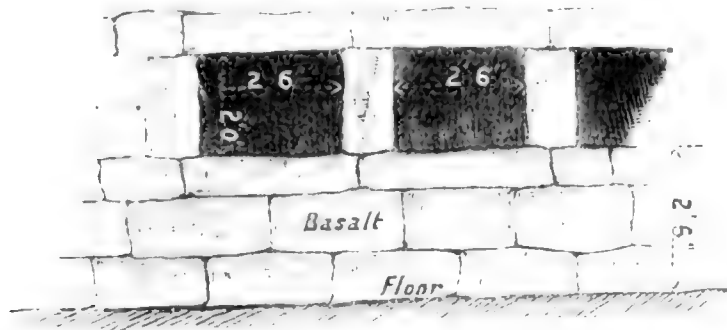
Khân es Sultan.

hewn stones of basalt are masoned together, evidently without mortar, and the roofing, as above noted, is the same as that, for instance, at Kh. Samakh, in Haurân ('Across the Jordan,' p. 183). The covering slabs are long and about a foot thick; they are sup-

ported by arches which cross from side to side. The Khân was partly subterranean, the present floor lying several feet below the surface of the yard. Near the western entrance I saw a head of an Apollo, beautifully carved in basalt, but

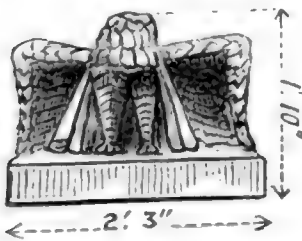


very much defaced, and lying buried in the manure heap of the stable. On the northern walls I found rows of mangers 2 feet 6 inches wide, 2 feet high, similar to those I had already seen in Jaulân and Haurân. Near the Sheikh's dwelling a fine basalt



Mangers.

arch-stone, with engraved egg ornament and frieze, was found, evidently that of a gate 8 to 10 feet wide ; and in front of his Menzûl the Sheikh had set up a fine Roman eagle, of the exact size and shape of the one found on the top of the Tell Abu en Neda, in



Roman Eagle at Amrâwah in Basalt.

Jaulân (*see* 'The Jaulân,' p. 250), only in this case the wings were spread and the head had unfortunately been broken off. The capitals were Corinthian, while the bases of the columns lying about were Attic. The building stone,


without exception, was basalt.

When the Sheikh had most willingly shown us all

these treasures, he looked up, and pointing westwards towards Wad esh Shelâleh, said: 'And now I will show you the ruin you look for. But few know it by the name of Âbil; it is generally called El Kueilby; but as it belongs to my own lands, I know its original name, and will show it to you, if you give me a share in the treasure you assuredly will try to find there.' All my asseverations to the contrary, that I merely wished to sketch some fine ornaments of the place, being a 'mehendis' (engineer) were in vain; the old fellow simply replied, 'See, my son, this village is my own; the land all around is my property, but I have 'harratîn' (sowers) to whom I rent the land; they plough, cultivate, and sow it, and the fifth of the net income of the crops is mine. The same with you, friend; you dig on my property at Âbil, and the fifth, no, the tenth, of all you find is mine, the remainder yours,' and with repeated chucklings he entered the menzûl, pushing me on in front of him. I had finally to agree to the bargain, as I saw that I should never convince the whimsical old fellow of the truth as to the nature of my explorations, and obtained a guide (being also trustee for his share of the treasure), who was to take us to Âbil. He then ordered breakfast, and when it had been despatched, bid us farewell, on the understanding that we should soon return again, and 'always consider him a good, trustworthy friend.' Hugging me affectionately

in his arms, he exclaimed, 'All my talk was a mere joke. I do not want my share of the treasure, Masalamy!' 'Allah selmak!' (God bless you), I replied, glad of having found a guide and got rid of this wonderful old Sheikh. I often spoke of him to people who knew the country, and, without exception, all esteem him and praise the hospitality of Sheikh Jeber.

We left 'Amrâwah in the later part of the afternoon, rode westwards for a mile and a half over a beautiful, fertile plain, leaving the village of Khirbet ez-Zneibeh to our right, and shortly arrived at the borders of the great Wâdy esh Shelâlch. Khirbet ez-Zneibeh is a village of thirty-five huts, a little better built than 'Amrâwah, standing just above the steep declivities of the wâdy, and thence occupying a fine and commanding view down into the river-bed and over across the surrounding country. The descent down the bank was very tiresome, as we had to pass from an elevation of 1,200 feet down to 245 feet above the sea level, the path being further rocky, winding, and steep, and the temperature high. When at last we arrived at the wâdy bed 1,000 feet below the plateau, horses and men were covered with sweat, and were glad to find a cool stream running between a luxurious growth of oleanders and cane. The slopes of Wâdy Shelâlch are of a soft limestone formation, sparsely covered with brushwood. This is

the natural boundary where the basaltic formation ceases, and it is also the limit of Haurân, for Shelâleh separates 'Ajlûn from that country. The little stream is hardly 2 yards across and about 6 inches deep, and may probably dry up in hot summer days completely. The ascent up the western slope was still more tiresome than the descent had been; the road led for an hour over continuous rocky terraces, along the side of a wâdy, winding round the bare slopes until we finally arrived at 'Ain el-Kattâra,\* عين القطارد a small stream flowing out of a cave in a bare perpendicular rock. On the soft, white limestone rock surrounding the 'Ain, we saw numerous 'wasm' or tribe-marks of the Bedawîn; most were the arrow-head wasm of the Z'obey زعبه Bedawîn; thus , also crosses were numerous, especially in the interior of the cave. In front of the spring there is a small piece of flat ground, which has often served as camping place for Bedawîn. In fifteen minutes we reached the plateau again, and found ourselves in the district of El Kefarât of 'Ajlûn. The plateau is fertile and well cultivated. After riding a mile further we at last reached the eastern shoulder of Wâd el-Kueilby, and on the other side appeared Âbil. The descent down the slopes was more easy,

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\* 'Ain el Kattâra, 'the slowly-dropping spring.

and took only half as long as that of Wâd esh Shelâleh. The Wâd el-Kucilby rises some miles south of Âbil, flows at first northward, and then bends somewhat to the north-west, and then north again, when it joins the Yarmûk not far west of the Tell ej-Jâmid (*see* map of Haurân), having a length of about eight miles, and a total fall (from 1,400 feet above the Mediterranean at its rise to about 80 feet at its junction) of about 1,300 feet.

On reaching the ancient site I proceed to enquire of the keepers of the herds grazing in the neighbourhood as to the name of the ruin, leaving meanwhile my guide at the stream below, where he was washing his feet and beginning his evening prayer. He, therefore, had no communication with them before my inquiries were put. They told me, 'the entire ruin is generally known by the name of El Kucilby القَيْلْبَةُ the diminutive of قَلْبُ (small well), for I find no other translation. The spelling الكَعِيلْبَةُ, pp. 10 and 101 of "Across the Jordan," is wrong. The hill to the north is also named Tell Âbil تَلُّ آبِل, and the one we now stood on (the southern ruin) was Tell Umm el 'Amad تَلُّ أُمِّ الْعَمَد. These are the true names. A later inquiry at Harta gave the same result.

We were thus on the very spot discovered by Seetzen on the 25th of February, 1806, which he

considered to be the Abila of the Decapolis, and which, to my knowledge, has not been visited or described by any subsequent explorer.

The same evening I surveyed and sketched a part of the caves and ruins, and then pushed on to Harta, which I reached after half an hour's ride. Next morning early I returned again, and completed my explorations, of which I now proceed to give an account.

The site is built over two hill summits. The northern one, Tell Âbil, is surrounded to the north and east by deep and steep wâdies, while on the south a less precipitous wâdy separates it from the Tell Umm el 'Amad,\* which ruin is situated on a projection of the high plateau at the same height as Tell Âbil, and is also surrounded on three sides by wâdies. The Tell Âbil contains many heaps of hewn stones, foundations of large buildings, fragments of columns and capitals, but no distinct ruin which could be planned. The central spot among the *debris* was the most elevated—1,340 feet above the sea, according to my barometer; and to judge from the large, well-hewn stones lying about, this must have been a prominent building, probably a castle. A

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\* [Meaning 'the mother of columns,' or the 'columned hill.  
—EDITOR.]

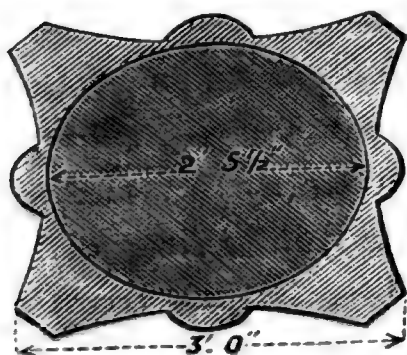
little lower down the hill to the south we find fragments of a gate, a lintel of basalt, 6 feet long, with a crowning ornament, and an open space in the city wall. This hill was surrounded by a well-masoned wall, the traces of which could be followed up in its southern and eastern sides, but the traces became lost on the north and also partly on the west side, where the slopes of the wâdy are very steep and the protection of the wall therefore the less needed. The average thickness of the wall varies from 2 to 3 feet. The stones are placed exactly like those of the walls of Umm Keis; no mortar was discoverable, but it must have originally existed, for the building stone, a crumbling limestone, was not fitted like the basalt to remain unmortared. The area thus surrounded by the wall covers about  $2\frac{1}{2}$  English acres. To the east a narrow shoulder of the plateau also shows scattered ruins surrounded by a wall, which continues round terraces down the slope to near the Wâd el-Kueilby. The other slopes below the main ruin are also terraced artificially and bordered by walls. (*See map.*)

A long straight wall running from east to west seems to divide the main ruin into two halves. The crumbling nature of the building stone has, however, left no traces of ornamentation. Passing down the western slope of Tell Âbil we arrive at a wall, which, 13 feet thick, pierced by a vaulted passage-way, partly preserved, in

part falling in ; and what was probably a similar passage-way is the opening where the road comes in from Harta. As the configuration of the land here shows a depression between Tell Âbil and the southern site, this wall may possibly be the remains of a bridge built to form an easy communication between the two places. This is the more likely, as the spot presents but little difficulty for such a construction. This bridge may be the same as that of which Seetzen speaks on page 372 of vol. I. I remember, too, having found a similar construction at Tabakât Fahil, Pella, also outside the city wall, and there uniting Tell el Husn with Fahil. After passing the bridge and continuing southwards for 100 yards more, we arrived at the ruins of Tell Umm el 'Amâd. The first monument visible is a temple. Fragments of columns lie about, with fine capitals and bases. Several of the basalt and limestone columns have from 1 foot 9½ inches to 3 feet diameter. Unluckily, it is just the larger and more interesting capitals that are worked in the crumbling limestone which abounds here, and is the rock formation from this side of Haurân down to the western border on the Ghôr ; it is the same stone we also found at Umm Keis, and which so rapidly disintegrates with the weather. One specimen of the capitals we saw has the shape of a cup. Each of the four corners shows a leaf, very probably a palm leaf, while the lower part is ornamented with acanthus leaves. The



height of this capital is 3 feet 8 inches ; its upper diameter 3 feet, its lower 2 feet  $5\frac{1}{2}$  inches. It is probably the identical one of which Seetzen speaks on p. 372, giving the design of the leaf ornament ; but he was wrong in stating that 'the capitals are of grey marble,' for, as before-mentioned, they are of a crumbling limestone, which, however, shows a greyish surface from the effects of weather.



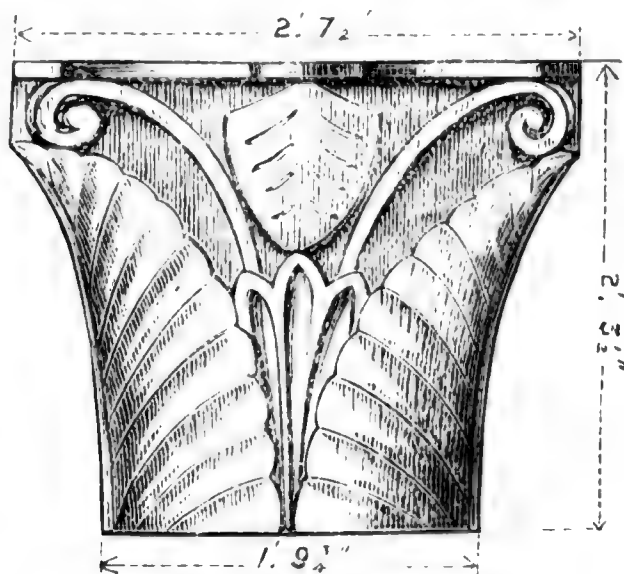
No. 1.—Capital at Tell Umm el 'Amâd.

The annexed sketch illustrates this capital (No. 1.)

A second capital (No. 2) also shows on each corner a leaf ornament with upper volutes of Ionic character with a shield in between on each side. Its height is  $23\frac{1}{2}$  inches, its upper diameter  $27\frac{1}{2}$  inches, its lower 1 foot  $9\frac{3}{4}$  inches. A

third specimen of the capitals (No. 3), and the largest of all, has an upper diameter of 4 feet, and a lower of 3 feet, with a height of 2 feet 10 inches. It has, therefore, a broader character. The acanthus leaf ornament covers the lower part, and winds up the sides, ending in the middle of

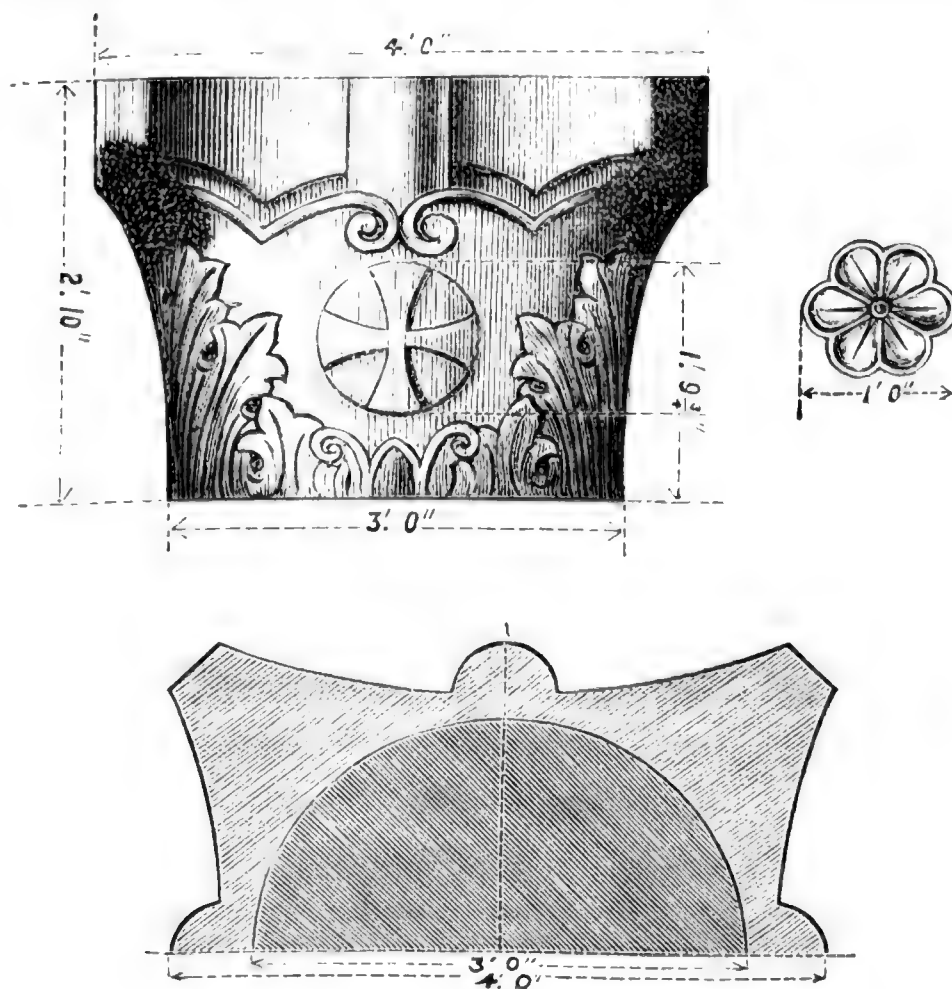
each side in volutes. Between the leaves on two of the



No. 2.—Capital at Tell Umm el 'Amâd.

sides we discovered a carefully carved cross, and on the two others a rose ornament. This emblem proves this building must have been of Christian origin, although from the absence of any traces of an apse discoverable among the ruin, it is impossible to make out whether it was a Christian basilica or a temple. The plan of this temple, as we may call it, is given on the plan of Tell Âbil. From what yet remains, the building must have had a rectangular form; the main axis runs nearly due east and west, inclining only  $4^{\circ}$  from true east towards north. The length from east to west is 152 feet, the entire present width from north to south is 65 feet. The width is divided into two not quite equal halves by a line of columns 7 feet

8 inches apart ; four columns of this row yet stand showing a height of 1 to 3 feet above the surface ; they



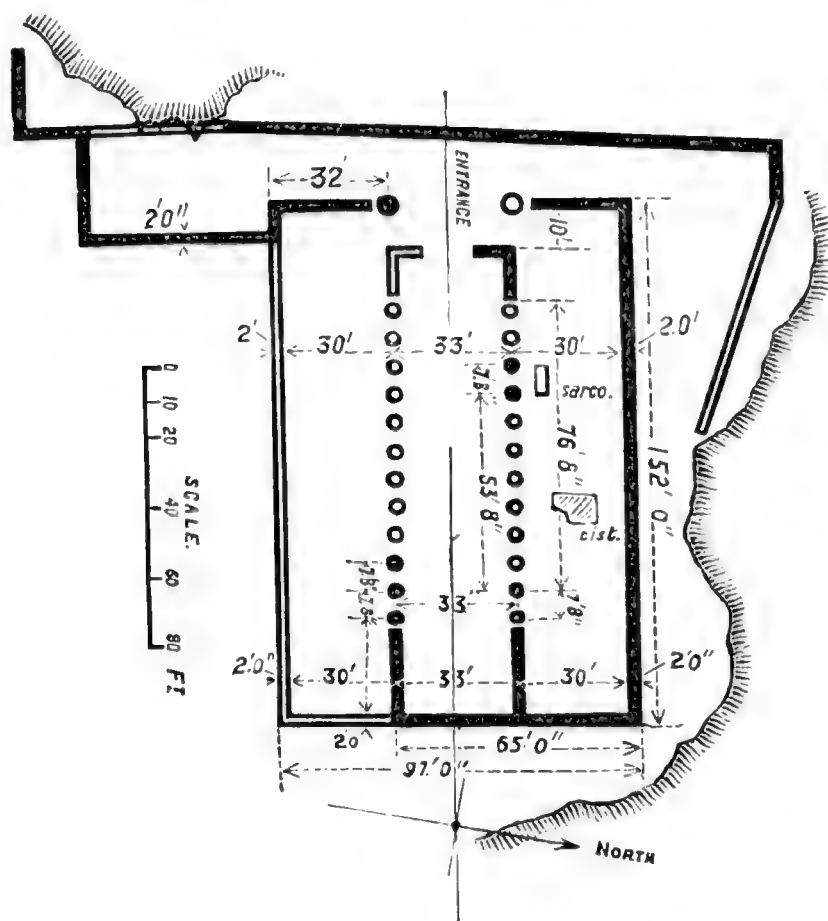
No. 3.—Capital at Tell Umm el 'Amâd.

were built of basalt and limestone, and composed of shaft-pieces from 3 to 4 feet long, and 1 foot 10 inches in diameter. The original number of columns on this division line must have been twelve. The present exterior wall on the south yet contains three columns, which, like the above, stand 7 feet 8 inches apart

though scarcely now visible above the surface, each being 1 foot 10 inches in diameter. At the western end of this line we remarked a large column 3 feet in diameter, near to which lay the capital No. 3 (with cross). The positions of the columns in the two rows correspond with one another. As the north wall contains no columns I presume there was another wall on the south, thus completing a temple of three nearly equal naves, and I am justified in this conjecture by the traces still existing in the western walls. The annexed plan shows the present plan and its probable restoration, with a width of 97 feet and a length of 152 feet. The western wall still continues towards south and north, and may have been built round a yard, like that of the Pella Basilica.

It is not impossible that apses may originally have existed in this building, for heaps of *débris* are still to be seen at the eastern end. I undertook a little excavation here, but could obtain no results. In the northernmost of the three naves I found a rectangular cistern, 19 by 19 feet, and 8 feet deep, the sides well plastered with reddish mortar. A fig tree is growing out of the interior. We also found a similar basin at the Pella Basilica. As the temple is situated about 130 feet above Wâd-el-Kueilby, the construction of a cistern to contain drinking water was not out of place. A little above this cistern we found a broken basalt sarcophagus, 6 feet long

covered with wreath ornaments and garlands. The large column shafts, 3 feet in diameter, and upwards



Plan of Temple on Tell Umm el 'Amâd.

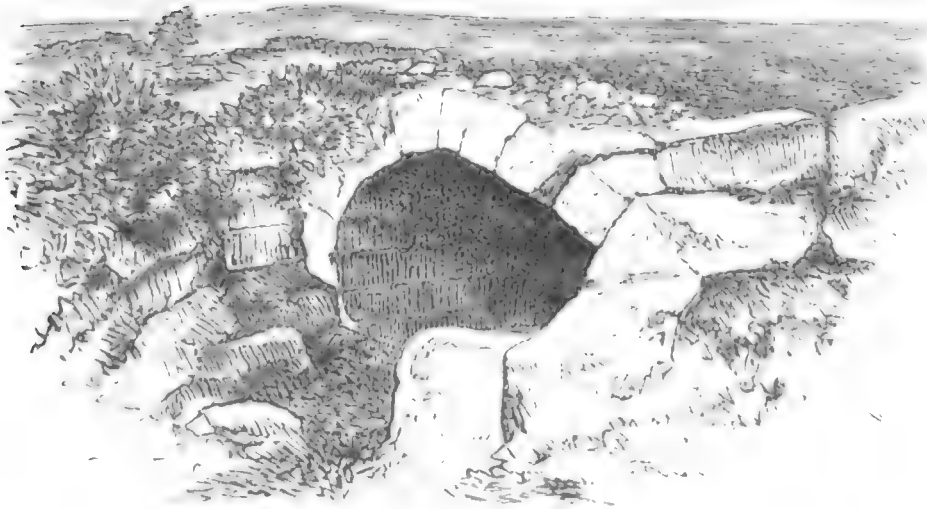
EXPLANATION.—Black lines, present wall; Double lines, supposed line of old wall.

of 14 feet long, show the same rectangular drill-holes on the outside, as those I noted on the Pella columns. The tribe of the 'Arab-el-Khurshân **عرب الخرشان** have engraved their 'Wasm' on many of these columns. With the exception of the few hard

limestone columns on the east of the temple which have a length of 16 feet 5 inches, and short basalt shafts, everything here is very much weather-worn and defaced. The foundation walls are hardly traceable. To the south of the temple ruin was a field scattered over with ruins, with traces of buildings and fragments of ornaments. It is a small plateau covering about four acres.

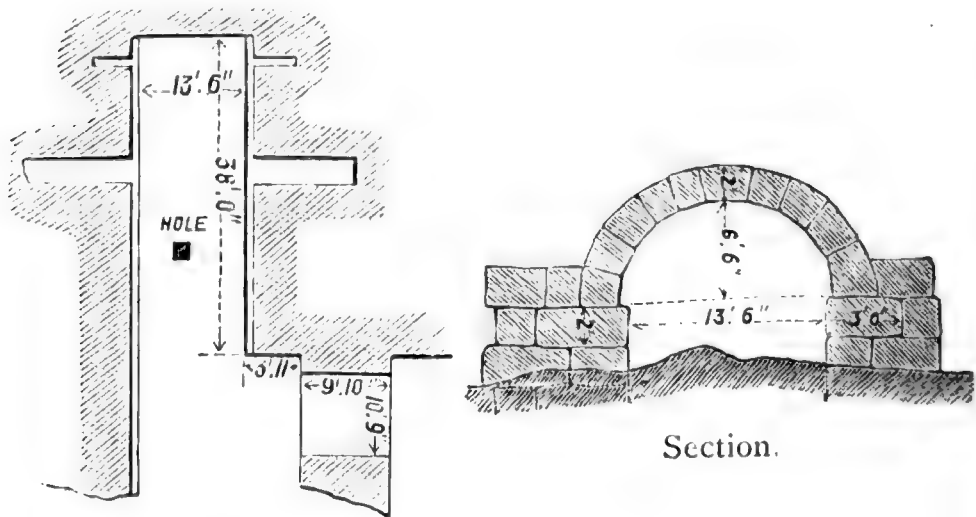
Having explored the two ruins of Tell 'Âbil and Umm-el-'Amâd, which are situated on the heights of the plateau, we next went down towards the Wâdy el-Kueilby, and not far from the temple, first came on a large theatre. The configuration of the slope was made use of to form the amphitheatre, the seats—of which but few remained—were placed on a masoned foundation, for the reception of which the soft rock had been prepared. No ornament, or cornices of any kind in this interesting monument were sufficiently preserved to be sketched, for the crumbling of the limestone soon destroys all traces of tool work. I found the diameter of this theatre to be 240 feet, measured at its widest part ; the rows of seats faced north-east. From the centre of the theatre a strong, straight wall running nearly due north, goes for 100 yards towards the paved road (*see* below), while immense heaps of ruins, stones, fragments of columns, etc., surmount this wall and mingle with the remains from another ruin, situated

further to the east towards the wâdy. This next ruin is of rectangular shape. The building stones are larger and more carefully hewn than those found elsewhere. Several columns stand to the height of a yard at the southern end of the building close to one another, and evidently not *in situ*. In the interior we found a wide cistern, now filled up with rubbish, and on the east a vault, with a nearly circular arch, 13 feet 6 inches wide, and 38 feet long, masoned with blocks of stone upwards of 3 feet long, and 2 feet high and broad. On the two longer sides there are openings, 12 feet long, by 2 feet high and wide. In the crown of the vault there is also a small opening. The accompanying illustration is from a photograph.



Vault at 'Abîl.

Below is given the section and plan of this vault. Being unplastered, I cannot conjecture the purpose to which it was originally put. The building above was possibly a sort of court-yard for the administration of justice.



Plan.

Section.

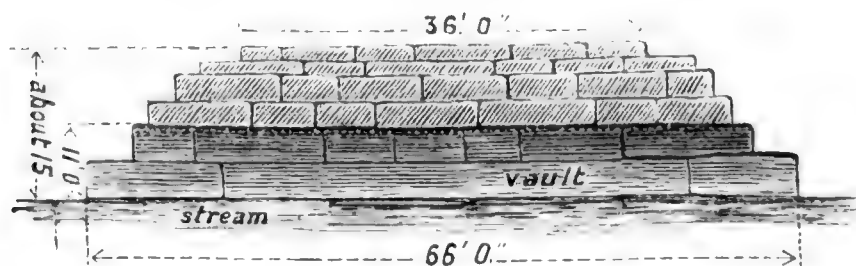
Still further down towards the stream we found many other ruins of buildings, with long straight walls and fragments of defaced ornaments; here and there also a column shaft or capital. Next to the theatre, and in a straight line 250 feet east of the temple just described, are the ruins of a second monument of Christian origin, a Basilica, of which the walls and apse yet stand to a height of 2 to 3 feet. This Basilica, as much as can yet be seen—for the interior is filled with heaps of building material—has but one large chamber, this is rectangular, 81 feet in length to the apse, and 62 feet wide. The apse



itself has a radius of 16 feet 1 inch, equivalent to a width of 32 feet 2 inches, giving an entire length for the church, along the main axis, of 97 feet 1 inch. On the west and on the south we find traces of doors 4 feet 7 inches wide. The walls are 2 feet 6 inches thick, with no signs of mortar, although this would have been indispensable, since the building is of limestone, large and carefully hewn; the manner of laying the courses being the same as that seen at the Basilica of Pella. The main axis is oriented north  $89^{\circ}$  east, and is, therefore, but  $1^{\circ}$  from running due east and west. No columns, or any interesting remains of cornices or ornamentation was discoverable anywhere near. The church is situated below the upper terrace of the temple, on a small level piece of ground; standing above and at the edge of a second terrace there about 20 feet high. It has thus a free view over the wâdy below, from which it is about 180 yards distant, with the beautifully green valley lying between. The steep slope below this Basilica is covered with *débris* fallen down from above.

Following down the road that comes in from Harta, we pass, as has been already described, through the opening in what we have supposed to be the bridge, between Tell 'Âbil with Tell Umm el 'Amâd, and passing further down the depression which separates the two ruins, we come, at 500 feet from the bridge, on a paved road of the present width of

from 10 to 16 feet, which runs in an easterly direction down to the dam, or bridge, across the Wâdy el-Kueilby. The paving stones are generally of basalt, being similar in character to those of the Darb er Rasei-fiyeh of Umm Keis, only these here are smaller, being only a foot square. The bridge itself has a length of about 250 feet, which is the width of the wâdy bed. It has but one circular vault, or arch, well preserved, across the little stream, only 9 feet 7 inches wide—a proof that the Wâdy el Kueilby never carries any considerable amount of water. The top line, or

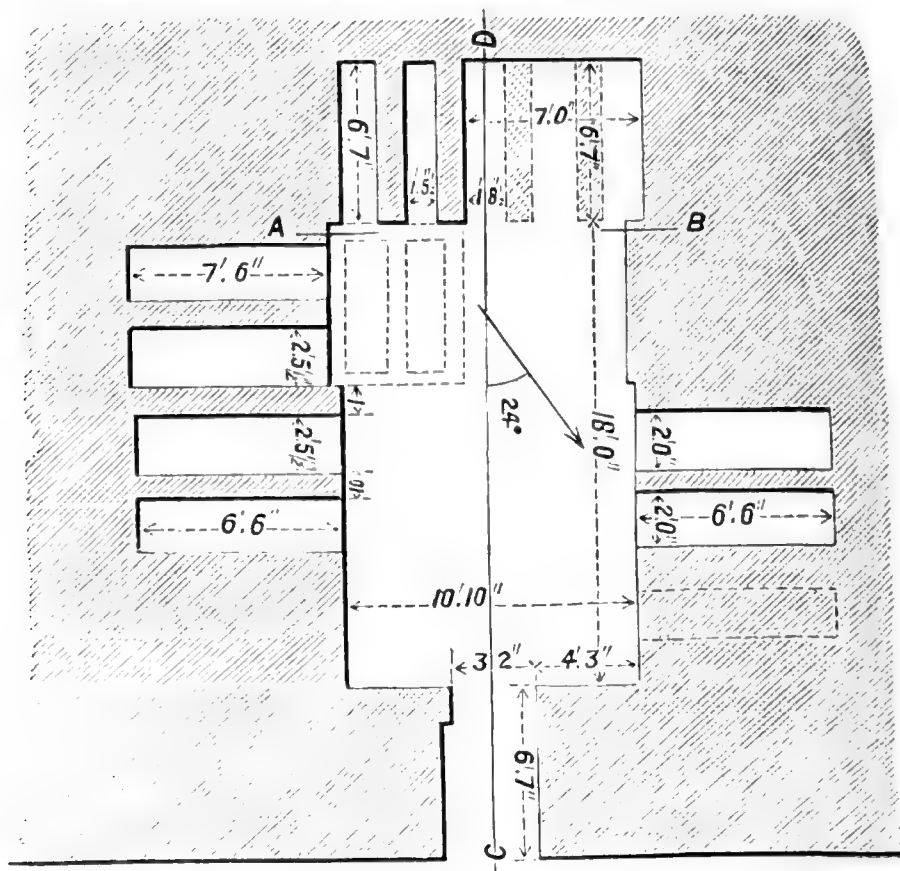


roadway, along the bridge is paved, and 36 feet wide. Below the structure widens out by terraced buttresses to a width of 66 feet, apparently a very unnecessary strengthening of the structure. The Wâd el-Kueilby contains clear, good water, which flows down to the Yarmûk; the stream is, at the bridge, 8 feet across, and 6 inches deep. At the east end of the bridge, on the roadway, is the Weli of the Mohammedan Saint, Sheikh Muferrej, شيخ مفرج, it is a small ruined building containing fragments of walls, with a little prayer niche on the south.

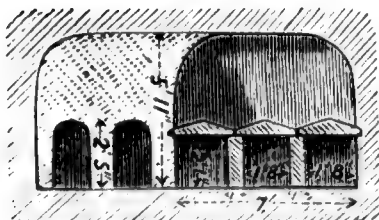
On the slopes of Wâdy Âbil, especially bordering the site of the old town, as well as on the Wâdy Umm el 'Amâd and the slopes near the Wâd el Kueilby, we found numerous caves hollowed out, in the soft limestone rock. The best specimens are on the rocky Wâdy Âbil and the adjacent slope. Of these, I give the plans of the most interesting. Beginning on the eastern slope near, and partly bordering on the Wâdy, we have cave No. 1 (*see* plan). It contains a central room, 18 feet by 10 feet 10 inches, of rectangular shape, and 5 feet 11 inches high. The walls are perpendicular, with rounded edges near the ceiling; the ceiling is level. The main axis is oriented North  $24^{\circ}$  East. The entrance is on the north-east, but at present partly filled up with rubbish; no stone gate was discoverable. The three walls contain Kokim, four are hewn in the wall to the left of the entrance; these are 6 feet 6 inches long, 2 to 3 feet high, and 2 feet 5 inches wide, a fifth Koka is unfinished. One foot below these, we find a second row of graves, one small Koka being in the wall, and two Loculi in the floor with a notch round the edge, for fitting the covering slab into (*see* plan).

These two-storied graves are characteristic of the sepulchral caves of Âbil, for on the west wall we also find two Kokim in the upper part, and one foot lower, a third Koka, with round edges (*see* plan).

The south wall contains on one side, two narrow



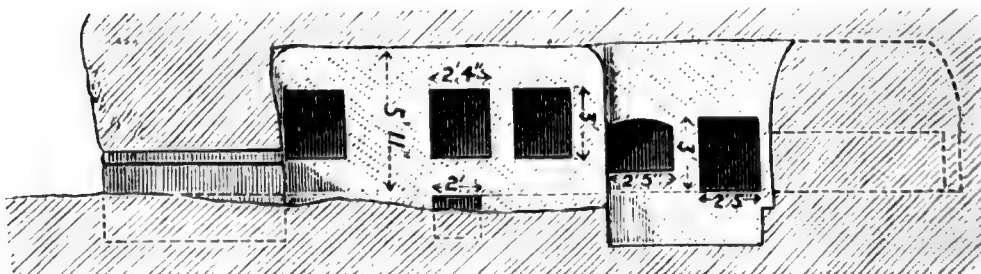
Plan of Tomb No. 1.



Section A, B.

L A λ

Marks found on the Wall of the Tomb.

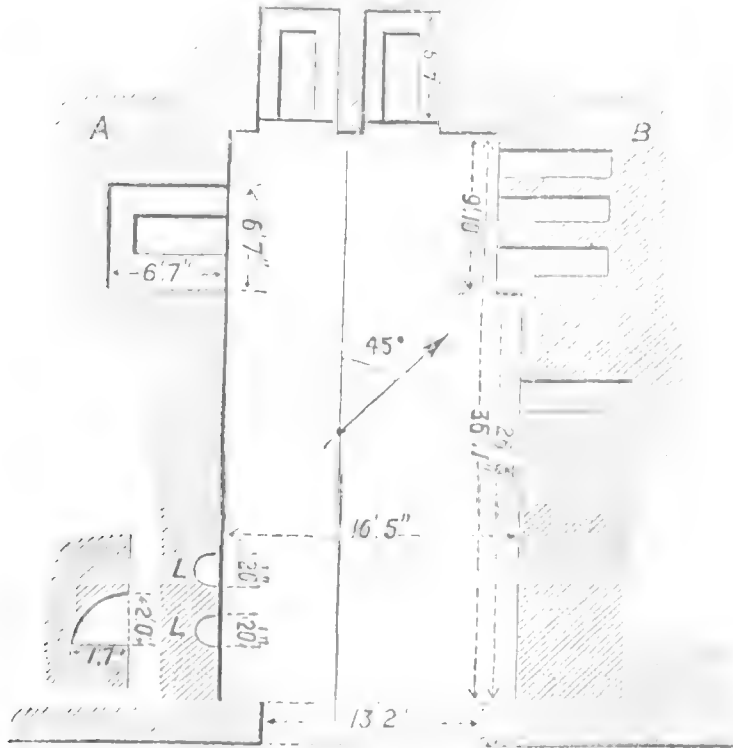


Section C, D.

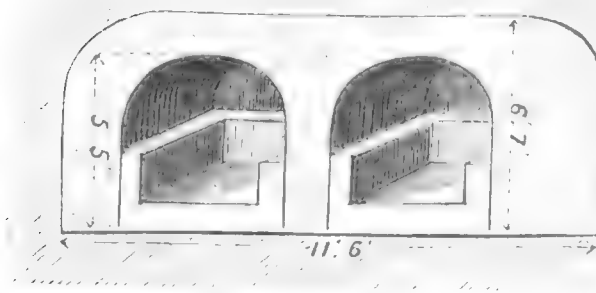
Kokim, only 1 foot  $8\frac{1}{2}$  inches wide, in which I found some human bones, and next to this, was a chamber, 7 feet wide, and 6 feet 7 inches deep, 5 feet 11 inches high, containing three sarcophagi, formed by two division walls, 1 foot thick, and each covered by a single huge slab of limestone. In front of these sarcophagi-Kokim, I found several stone plates, 2 feet  $1\frac{3}{4}$  inches high, 2 feet wide and 9 inches thick, of a soft white cretaceous stone, on each of which was cut in bas-relief, the semblance of the bust of a human figure. Unfortunately, these had been all defaced, as I was told, by the fellahîn, who take such figures to represent idols, and in accordance with the dictates of their religion, destroy them. The work is not very skilfully done, but from what we could see, was probably of Christian origin. These stones have served for closing the sarcophagi. No sign of plastering was anywhere discoverable. A neighbouring cave to that just described, contained Kokim and Loculi, and above, on each wall, as many as four rows of semicircular holes, with from 8 to 10 in the row. These, to judge from their black colour, and traces of soot, must have served as stands for oil lamps, used to illuminate the sepulchral chamber. Each hole was some 8 inches high, 4 inches wide, and 3 to 4 inches deep.

Another cave (plan No. 2) contains a central room, 36 feet 1 inch long, and 16 feet 5 inches wide, 6 feet

7 inches high, the main axis being oriented north  $45^{\circ}$  west. The entrance, 13 feet 2 inches wide shows neither



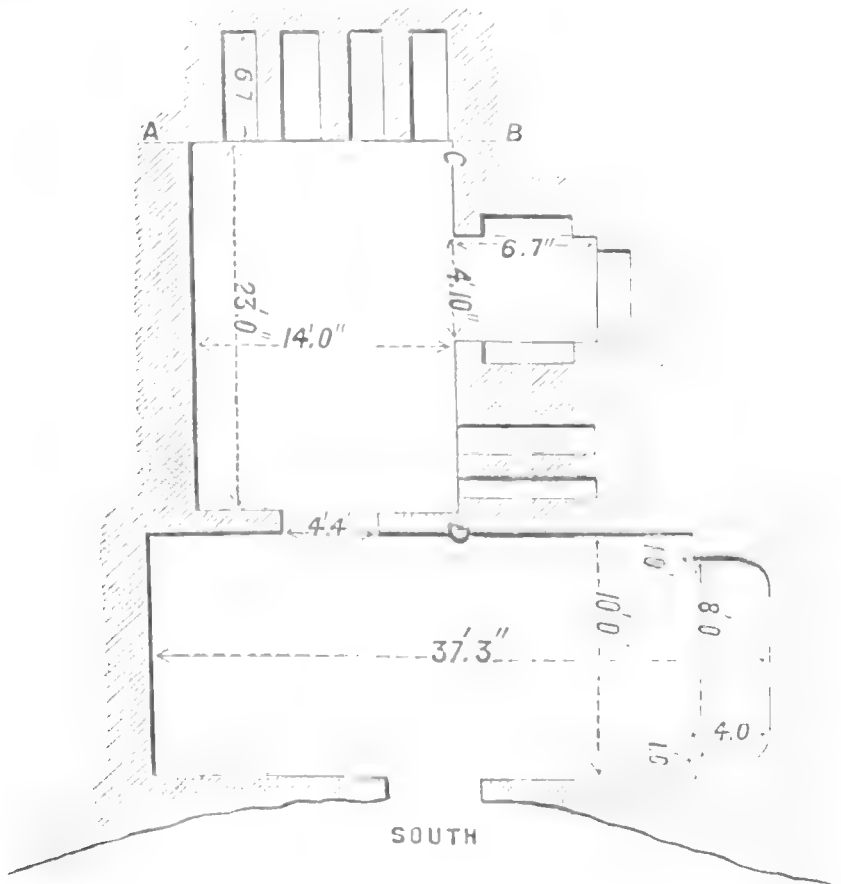
Plan of Tomb No. 2.



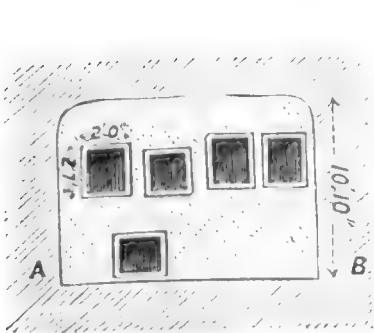
Section A, B.

stone door nor flange, a fact which would tend to prove that these entrances were shut by masonry.

To the left, on entering, we find two large lamp stands (L L), 2 feet wide, 2 feet high, and 1 foot 7 inches deep ; further on, on the same wall, is a Koka under



Plan of Tomb No. 3.



Section A B.



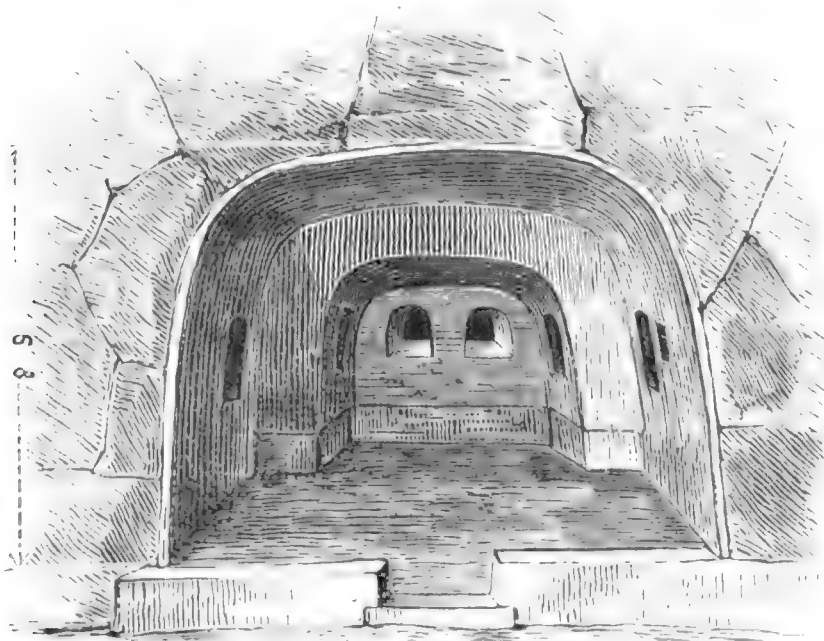
Section C, D.

an arcosolium, 6 feet 7 inches wide and 6 feet 7 inches deep, 5 feet high ; there were also two Kokim, each under its arcosolium, in the back wall facing the entrance (north). These arcosolia, are very carefully worked out of the rock ; the Kokim also were pierced with special care, they fill the entire length of the arcosolium, the width being less, forming a recess, so that a stone cover could be placed on each. The east wall contains three Kokim in a separate chamber, and a fourth Koka lies more towards the entrance. These tombs are but single storied.

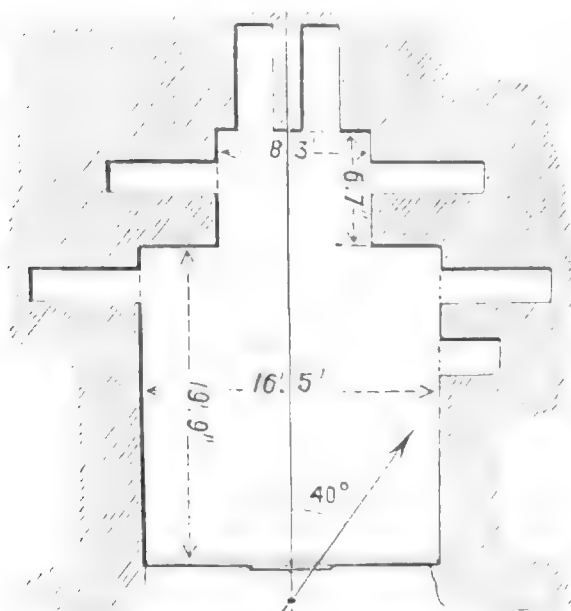
A further set of tombs (Plan No. 3) contains at the southern entrance a large ante-chamber, 37 feet 3 inches long, 10 feet wide, with a Loculus under an arcosolium, 8 feet long, 4 feet wide, evidently unfinished. Passing this chamber, we enter by a doorless aperture, 4 feet 4 inches wide, into the actual sepulchre, 23 feet long, 14 feet wide, 10 feet 10 inches high, with four Kokim in the upper storey, each being 2 feet  $7\frac{1}{2}$  inches high, 2 feet wide, and 6 feet 7 inches long, the outside of each being bordered by a groove  $2\frac{1}{2}$  feet wide. The eastern wall contains a chamber 4 feet 10 inches by 6 feet 7 inches, with three Loculi under an arcosolium formed by a pointed arch. On the other side of this chamber there were two other Kokim. The western wall has no graves. A very peculiar tomb is that of Plan No. 4. There is no door, the entire south front is open to a width of



16 feet 5 inches, which is also the width of the



View from South.



Plan of Tomb No. 4.

sepulchral chamber, its length being 19 feet 9 inches.

This open entrance has sloping walls and a rounded ceiling, and is surrounded by a round cornice, about 2 inches thick, which, for the greater part, has been much damaged by the weather. Instead of any door, there is merely a step which leads from the interior to the small path which passes beside these caves.

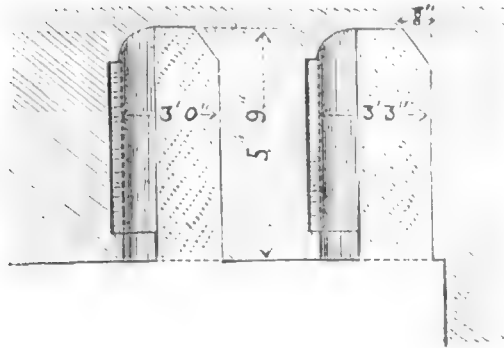
In the wall facing the entrance, we found a chamber 6 feet 7 inches by 8 feet 3 inches, containing to the north two Kokim, with round ceilings, and on each of the side walls one Koka of the same shape, all well and carefully worked. In the main chamber, we found to the right, one small and one ordinary Koka, and to the left also one Koka. Parts of the interior show signs of plastering.

The most carefully constructed tomb that is illustrated in Plan No. 5. The entrance to this cave is much broken and defaced. It leads into a chamber measuring 9 feet 10 inches by 8 feet 4 inches.

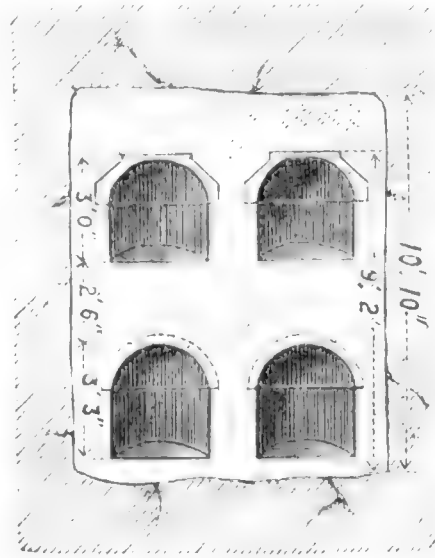
In the wall opposite, are two storeys of Koka, each storey containing two well-worked tombs.

The two upper Kokim are each 2 feet 6 inches wide, and 3 feet high, and 5 feet 9 inches long, with a small niche at the end, where the rock slopes up, in order to permit the head of the dead body being laid here, as on a cushion (*see* Section A, B. and C, D.). The ceiling of each Koka is rounded at the corners and carefully smoothed. The exterior of the Koka is framed by a five-cornered border. The Kokim of the lower storey

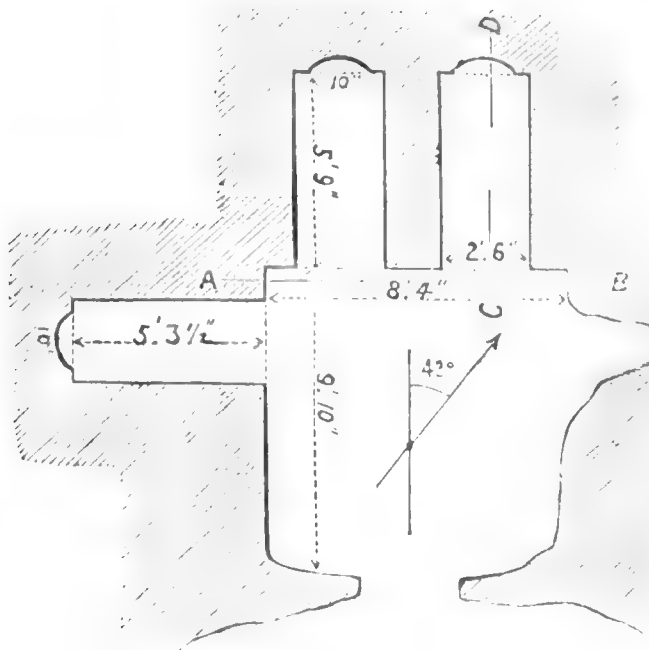
are each 3 feet 3 inches high, and each has a circular



Section A, B.



Section C, D.

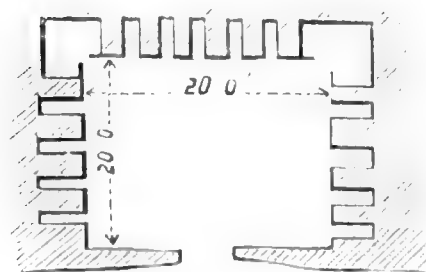


Plan of Tomb No. 5.

frame. On the wall to the left of the entrance, is a Koka of similar construction to the above, and to

the right is a sixth Koka still unfinished. The interior of this cave, which, to judge from its very careful workmanship, must have belonged to some wealthy family, is entirely plastered over and painted of a reddish colour. The ornamentation is scarcely any longer visible, but must originally have represented simple lines and cornices, the design, however, was far too much obliterated to permit of any drawing being made.

Besides the caves that are here planned, I visited another containing nine Kokim and three Loculi under arcosolia; also a two-storeyed cave measuring 37



Plan of Tomb No. 6.

by 30 feet, containing both sorts of graves, but this last was in a very defective state. Another cave 20 by 20 feet, contained nine Kokim in the upper storey, and thirteen Kokim in the lower, with two

larger chambers opening from the corners (*see* plan No. 6.)

The remainder of the caves in the neighbourhood of Tell Âbil are of similar construction and plan to those already described. They are very numerous, but the soft cretaceous rock in which they are tunnelled, has in many places fallen in.

The above account is all I am able to give as the result of my short stay of two days at the site of

Âbil. I may now add a few words as to the history of this site, which is supposed to be the Abila of the Decapolis.

Josephus, (*Antiq.* XII., 3) gives us very little information about Abila; he states that when Antiochus had conquered Scopas, a general commanding the armies of the son of Ptolemy Philopator, who had subdued the Jews 'in the high regions,' he (Antiochus) conquered Batanæa, Samaria, Abila, and Gadara.

According to Ritter, (*Erdkunde*, XVB., p. 1,060) St. Jerome names an "Abela, vini fertilis, in duodecimo a Gadaris milliario contra orientalem plagam." This is the same city which often was named together with Gadara or Capitolias, and its bishop subscribed his signature at the Council of Jerusalem in conjunction with the Bishops of the neighbouring cities of Hippos and Amathus. Further, Abila was a city situated in Northern Peraea. According to Burckhardt's 'Travels in Palestine' (Vol. I, p. 537, Note to p. 425), Eusebius also calls the city 'Αβελ (Abel) and places it 12 miles east of Gadara. According to the same authority, Reland has read on a palmyrenean inscription *Αβιλη της Δεκαπολεως* (the Abila of the Decapolis).

Wetzstein ('Hauran und die Trachonen' p. 101) identifies Âbil, above described with the Abel-beth-maachah mentioned in the Bible (2 Kings, XV. 29), where Tiglath-pileser, King of Assyria, met with

resistance when he conquered Peraca(\*) ; he places the present Âbil on the southern borders of the Yarmûk. Dr. Wetzstein further states that the southern bank of the Yarmûk near Abîl, had served as a bulwark to the Moslems in 635 A.D. when they were expecting the attack of the Greek army, and that even in 1859 this locality had again protected the Bedawîn tribe of the Ruwala, for the advancing enemy had not dared to attack them there.

In modern days, Seetzen, as above mentioned, is the only traveller who has ever visited the place, and of it he gives an account on p. 371 of Vol. I. of his 'Travels in Syria, Palestine, &c.' He reached Abîl with great difficulty from Beit Râs, and mentions the heaps of ruins, the columns and capitals (which he describes as mostly of the Ionic order), the foundation walls, caves, vaults, and parts of the city wall, with the two bridges. He is of opinion that a temple stood on Tell Umm el 'Amad. In his days (February 1806) as at the present, no human being lived in the place.

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\* [Abel - beth - Maachah, or Abel Maim, is generally identified with the present village of Abîl el Kamh, a few miles west of Baniâs. Abila of the Decapolis is probably the place mentioned by the geographer Yâkût, in 1225, under the name of Abîl az Zait. "Geographical Dictionary, I. 56."—EDITOR.]

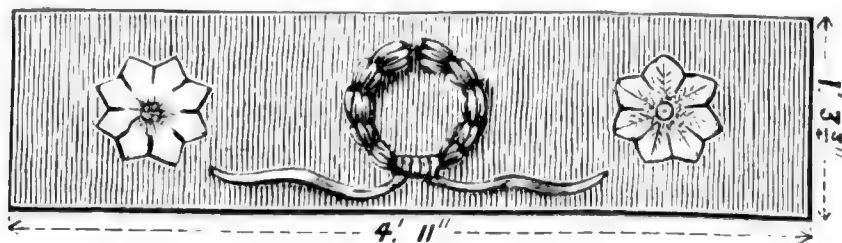
That the present Tell Âbil is to be identified with the ancient Abîla of the Decapolis, can hardly be questioned. The site of the latter is always mentioned as being near Gadara (for which we adopt Umm Keis), being at a distance of twelve Roman miles from it. Comparing this with my maps and triangulations of Northern 'Ajlûn, I find the distance, as the crow flies, from Umm Keis to Tell Âbil to be  $11\frac{1}{4}$  English miles, which, taking the old Roman mile at  $1472\frac{1}{2}$  metres, brings it up to exactly  $12\frac{3}{4}$  Roman miles. From Âbil to Beit Râs, I found to be  $6\frac{1}{4}$  English miles = 6.8 Roman miles, and from Beit Râs to Umm Keis  $11\frac{1}{8}$  English miles = 12 Roman miles. The distance between Capitolias and Gadara is, according to the Peutinger Tables, 16 Roman miles, which is 4 miles too much, if Beit Râs is to be identified with Capitolias; but it must be remembered that the distances here given, are in the straight line, which a road never follows, and therefore by road these distances must always be counted as longer. With, therefore, the correspondence in the distances, and the name (Âbil = Abila), further, the considerable ruins in proof of the existence of a large city, containing Christian churches, going to prove that it very probably was the seat of a Bishop,—I do not hesitate to identify the present site with Abila of the Decapolis.

From this place, I visited on several occasions, the village of Harta, which lies about half an hour's ride

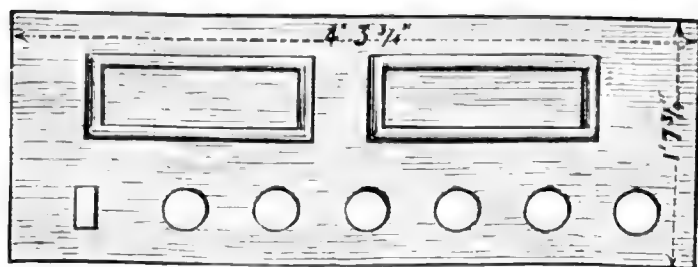
from Tell Âbil. The huts, to the number of 40, are of stone, and much better built than those at Amrâwah. The Sheikh's dwelling and Menzûl are large, well built, and clean, and the inhabitants of Harta are hospitable and friendly.

The soil of the place is poor, but groves of olive trees afford a good income to the population. The village is built close to the Wâdy Harta and has a fine out-look down into Wâdy and beyond the Yarmuk over Southern Jaulân.

Of antiquities, I only found a few caves and a Basalt-gate and lintel, built at the entrance gate of



Ornamental Lintel at Harta.



Ornamental lintel at Harta.

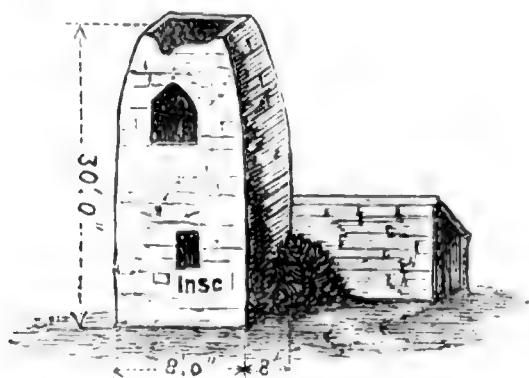
the Sheikh's yard, which, I suppose, was brought from one of the neighbouring caves.



From Harta, I travelled towards Wâdy Hebrâs, and passed on the road, half a mile south of Harta, a small ruin called Khirbet Treitâb خربة تريتاب. It consists of nothing but a large heap of scattered ruins. On the slopes beyond, I noticed caves, which on this occasion I could not explore. From here we rode down into the Wâdy and reached the village of Hebrâs حبراس after another half mile of road. Hebrâs has a fine spring, with a plentiful water supply, built up with ancient masonry; other wells of considerable depth, are found along the Wâdy bank, which is dry in summer. Hebrâs consists of two quarters, one, the original village, is built half way up the slope, and contains about twenty miserable huts, the new quarter lies nearer to the well and Wâdy, and consists of ten huts and some caves, plentifully populated by insects. The population of Hebrâs is for the greater part Harratin or ploughers, *i.e.*, fellahîn, who cultivate the soil for the rich proprietors, either for daily pay, or for a small share of the crops. This class of fellahîn is considered the poorest, and they occupy a very low grade of civilisation.

At the time (1812) when Burckhardt (*Travels in Palestine*, Vol. I., p. 425) visited the place, he speaks of Hebrâs as the most prominent village of the district of El Kefarât, and says it was inhabited by a number of Greek Christians. Between the two quarters of the village, and on the road to Samar,

there stands the Mêdanet Hebrâs,\* one of those peculiar towers, we so often met with in Haurân. The tower



Mêdanet Hebrâs.

rises to the height of 30 feet, and is 8 feet square. At its southwestern end was a Jamaah, and ruins of the mosque were still visible. The upper part is fallen in, but on its northern front

I found a weather-beaten Arabic inscription, which, as much as I could make out, refers to the date of the building in the year of the Hejira.

From Hebrâs, we followed the road leading from Samar for nearly a mile, up the slope and across the plateau, then turning to the left rode down to the Wâdy 'Ain et Turâb, leaving Khirbet ed Deivi to the right—a small ruin, with scattered building stones. After a mile or more of riding, we arrived at the junction of the water-course coming down from the spring of 'Ain et Turâb. Above this junction there is another small ruin on a circular mound, the name of which, none of the passing fellahîn could tell me; it is named 'Al Khirbet,' (the Ruin), they unanimously stated. The road next winds round the slope and

\* Mêdanet, or Minaret.

crosses the little brook, which, being a perennial stream, keeps the Wâdy of a beautiful green, and enables this valley to be cultivated. We next climbed up the opposite slope, and after a third mile's ride arrived at the fertile plateau from which point we could see Ibdar before us, and Samar beyond the Wâdy at our backs; a mile more, the fourth from Hebrâs, and we arrived at the Rujm el Menâra, described in my report on northern 'Ajlûn. A ride of three hours along the well-wooded watershed of the Yarmûk and the Wâd el 'Arab, following down the ancient aqueduct coming from Haurân, we finally reached Umm Keis, where we passed a most uncomfortable night in a sort of cavern, surrounded by snoring fellahin and coughing goats, and next morning early, proceeding to the hot springs of El Hammi, took a warm bath, and arrived before noon once again at Tiberias.

THE END.



## THE PALESTINE EXPLORATION FUND.

### NOTES AND NEWS.

HERR SCHICK's paper on the Mount of Olives is published in the present number, with plan of the newly-discovered tombs, and sketches of Roman tiles, &c., found during recent excavations.

His account of the ancient Church recently discovered in the street of Sitti Maryam, at Jerusalem, with plan of the same, is also given, and a section of the large cistern near the Church of the Holy Sepulchre, which was described in the July number of the *Quarterly Statement*, will be found facing page 210 of the present number.

Further excavations north of Damascus Gate have resulted in the discovery of rock tombs with stone doors, and of inscriptions. An ancient rock-hewn Church has been discovered at Siloam.

Mr. F. F. Tuckett has forwarded a letter received by him from Père Leon Cré of the Algerian Mission at Jerusalem, containing an account of further discoveries at the Pool of Bethesda. Père Cré writes, "In clearing out the crypt of the church built at the south-east angle of the Pool, in the time of the Crusades, at the north-west corner, close to an opening which permits the water to be seen and drawn up, and surrounding a little door still obstructed, which doubtless affords a way of descent to the middle of the Pool, we found very interesting remains of a mural painting which marvellously confirms the already numerous proofs of the authenticity of the Pool Bethesda. Arab fanaticism has destroyed the heads and hands of the figures, but notwithstanding that, above the little door mentioned above there is visible the beautiful and well preserved *nimbus* of a *winged* figure, which causes the water by which it is surrounded in the picture to be moved and agitated. It is an exact interpretation of the first part of the 4th verse of the 5th chapter of St. John, "An angel went down at a certain season into the Pool and troubled the water *καὶ ἐ-ἀπασσειν τὸ ὕδωρ*." A report of this interesting discovery has also been sent by Herr Schick.

Dr. Torrance, of the Scottish Mission, has kindly undertaken to conduct a series of meteorological observations at Tiberias for the Fund. Should it be found practicable to carry out this difficult undertaking, the observations will, with those made at Saron, now being published by Mr. Glaisher, and those

made by Dr. Chaplin at Jerusalem, and reported in the *Quarterly Statement* for 1883, place the Society after a few years in the possession of materials for a fairly complete account of the meteorology of Palestine. It will be remembered that Tiberias is 682 feet below the level of the Mediterranean Sea. No regular series of meteorological observations has ever been made in such a depressed situation, and the results will therefore be exceptionally interesting. As the neighbourhood of Jericho is becoming, to some extent, a place of residence for Europeans, it is hoped that opportunity may before long present itself for making meteorological observations there also.

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An interesting letter has been received from Mr. W. Lethaby, who has been residing two years in Kerak as a Missionary. He urges the Fund to commence explorations there, and reports the discovery of some stones with sculptured figures, which he thinks are "of the Assyrian type." It is hoped that further information may soon be received from Mr. Lethaby on the subject.

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Mr. Henry A. Harper's work, on "The Bible and Modern Discoveries" is nearly ready. It is an endeavour to present in a simple but yet connected form the Biblical results of twenty-two years' work of the Palestine Exploration Fund. The writer has also availed himself of the discoveries made by the American Expeditions and the Egyptian Exploration Fund, as well as discoveries of interest made by independent travellers. The Bible story, from the call of Abraham to the Captivity, is taken, and details given of the light thrown by modern research on the sacred annals. Eastern customs and modes of thought are explained whenever the writer thought they illustrated the text. To the Clergy and Sunday School Teachers, as well as to all those who love the Bible, the writer hopes this work will prove useful. He is personally acquainted with the land, and nearly all the places spoken of he has visited, and most of them he has moreover sketched or painted. The work will be issued in one large, handsome volume of 600 pages. It will be illustrated with a map and many plates. Price to the public, 16s. ; to subscribers, 10s. 6d., carriage included.

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Mr. Guy le Strange's important work, "Palestine under the Moslems," which is a description of Palestine according to the mediæval Arab geographers, is also in the press.

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The first volume of the "Survey of Eastern Palestine," by Major Conder, has been issued to subscribers. It is accompanied by a map of the portion of country surveyed, special plans, and upwards of 350 drawings of ruins, tombs, dolmens, stone circles, inscriptions, &c. The edition is limited to 500. The first 250 subscribers pay seven guineas for the three volumes, with an index; subscribers to the "Survey of Western Palestine" are privileged to have the volumes for this sum. The price will be raised, after 250 names are received, to twelve guineas. *The Committee are pledged never to let any copies be subscribed under the sum of seven guineas.* Mr. A. P. Watt, 2, Paternoster Square, is the Sole Agent. The attention of intending subscribers is directed to the announcement on the inside of the cover of this number.

Some progress has also been made with the second volume, which consists of M. Lecomte's beautiful drawings, illustrating the Mission of M. Clermont-Ganneau in 1874. The illustrations for the third volume, Mr. Chichester Hart's "Flora and Fauna" of the Wâdy Arabah, are nearly ready.

The Committee have added to their list of publications the new edition of the "History of Jerusalem," by Walter Besant and E. H. Palmer (Bentley & Son). It can be obtained by subscribers, carriage paid, for 5s. 6d., by application to the Head Office only. The "History of Jerusalem," which was originally published in 1871, and has long been completely out of print, covers a period and is compiled from materials not included in any other work, though some of the contents have been plundered by later works on the same subject. It begins with the siege by Titus and continues to the fourteenth century, including the Early Christian period, the Moslem invasion, the Mediæval pilgrims, the Mohammedan pilgrims, the Crusades, the Latin Kingdom, the victorious career of Saladin, the Crusade of Children, and many other little-known episodes in the history of the city and the country.

The books now contained in the Society's publications comprise an amount of information on Palestine, and on the researches conducted in the country, which can be found in no other publications. It must never be forgotten that no single traveller, however well equipped by previous knowledge, can compete with a scientific body of explorers, instructed in the periods required, and provided with all the instruments necessary for carrying out their work. The books are the following (*the whole set can be obtained by application to Mr. George Armstrong, for 37s. 6d., carriage paid*):—

By Major Conder, R.E.—

- (1) "Tent Work in Palestine."—A popular account of the survey of Western Palestine, freely illustrated by drawings made by the author himself. This is not a dry record of the sepulchres, or a descriptive catalogue of ruins, springs, and valleys, but a continuous narrative full of observations upon the manners and customs of the people, the Biblical associations of the sites, the Holy City and its memories, and is based upon a six years' experience in the country itself. No other modern traveller has enjoyed the same advantages as Major Conder, or has used his opportunities to better purpose.
- (2) "Heth and Moab."—Under this title Major Conder provides a narrative, as bright and as full of interest as "Tent Work," of the expedition for the *Survey of Eastern Palestine*. How the party began by a flying visit to North Syria, in order to discover the Holy City—Kadesh—of the children of Heth; how they fared across the Jordan, and what discoveries they made there, will be found in this volume.
- (3) Major Conder's "Syrian Stone Lore."—This volume, the least known of Major Conder's works, is, perhaps, the most valuable. It attempts a task never before approached—the reconstruction of Palestine from its monuments. It shows what we should know of Syria if there were no Bible, and it illustrates the Bible from the monuments.

- (4) Major Conder's "Altaic Inscriptions."—This book is an attempt to read the Hittite Inscriptions. The author has seen no reason to change his views since the publication of the work.
- (5) Professor Hull's "Mount Seir."—This is a popular account of the Geological Expedition conducted by Professor Hull for the Committee of the Palestine Fund. The part which deals with the Valley of Arabah will be found entirely new and interesting.
- (6) Herr Schumacher's "Across the Jordan."
- (7) Herr Schumacher's "Jaulân."—These two books must be taken in continuation of Major Conder's works issued as instalments of the unpublished "Survey of Eastern Palestine." They are full of drawings, sketches, and plans, and contain many valuable remarks upon manners and customs.
- (8) The Memoirs of Twenty-one Years' Work.—A copy of this book is presented to every subscriber to the Fund who applies for it. The work is a popular account of the researches conducted by the Society during the past twenty-one years of its existence. It will be found not only valuable in itself as an interesting work, but also as a book of reference, and especially useful in order to show what has been doing, and is still doing, by this Society.
- (9) Herr Schumacher's Kh. Fahil. The ancient Pella, the first retreat of the Christians; with map and illustrations.
- (10) Names and Places in the Old and New Testament and Apocrypha, with their modern identifications, with reference to Josephus, the Memoirs, and *Quarterly Statements*.
- (11) Besant and Palmer's "History of Jerusalem," already described.

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For the convenience of subscribers in following out the position of recent discoveries in Jerusalem, a plan of the city, reduced from the Ordnance Survey plan by permission, was issued with the April number of the *Quarterly Statement*, on which the recent discoveries are noted in red.

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We regret to record the death of the Rev. Henry Hall-Houghton, a member of our General Committee, and for many years a generous supporter of the Society. Mr. Hall-Houghton had long ceased to take any cure of souls, but greatly furthered the advancement of the study of the New Testament by donations and personal encouragement.

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Branch Associations of the Bible Society, all Sunday Schools in union with the Sunday School Institute, the Sunday School Union, and the Wesleyan Sunday School Institute, will please observe that by a special Resolution of the Committee they will henceforth be treated as subscribers and be allowed to purchase the books and maps (by application only to the Secretary) at reduced price.

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The friends of the Society are earnestly requested to use the "Memoirs of Twenty-one Years' Work" as a means of showing what the work has been, and what remains to be done.



The income of the Society, from June 18th to September 17th, inclusive, was—from subscriptions and donations, £110 8s. 2d.; from all sources, £426 9s. 5d. The expenditure during the same period was £349 18s. 5d. On September 20th the balance in the Bank was £439 2s. 11d.

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Subscribers are begged to note that the following can be had by application to the office at 1s. each:—

1. Index to the *Quarterly Statement*, 1869–1880;
  2. Cases for Herr Schumacher's "Jaulân;"
  3. Cases for the *Quarterly Statement*, in green or chocolate.
- 

Early numbers of the *Quarterly Statement* are very rare. In order to make up complete sets the Committee will be very glad to receive any of the following numbers:—

No. II, 1869; No. VII, 1870; No. III (July) 1871; January and April, 1872; January, 1883, and January, 1886.

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It having again been reported to the Committee that certain book hawkers are representing themselves as agents of the Society, the Committee have to caution subscribers and the public that they have no book hawkers in their employ, and that none of their works are sold by itinerant agents.

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While desiring to give every publicity to proposed identifications and other theories advanced by officers of the Fund and contributors to the pages of the *Quarterly Statement*, the Committee wish it to be distinctly understood that by publishing them in the *Quarterly Statement* they neither sanction nor adopt them.

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As many inquiries have been made about transparent slides, a selection will be made from the photographs of the Society for this purpose. Subscribers wishing to have any are requested to communicate with the Assistant Secretary.

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Subscribers who do not receive the *Quarterly Statement* regularly are asked to send a note to the Secretary. Great care is taken to forward each number to all who are entitled to receive it, but changes of address and other causes give rise occasionally to omissions.

The only authorised lecturers for the Society are—

- (1) Mr. George St. Clair, F.G.S., Member of the Anthropological Institute and of the Society of Biblical Archæology.

His subjects are :—

- (1) *The Buried City of Jerusalem, and General Exploration of Palestine.*
- (2) *Discoveries in Assyria, Chaldea, and Palestine.*
- (3) *The Moabite Stone and the Pedigree of the English Alphabet.*
- (4) *Jerusalem of David, Nehemiah, and Christ.*
- (5) *Sight-seeing in Palestine: a Narrative of Personal Experiences.*
- (6) *Israel's Wars and Worship, illustrated by the new Survey.*
- (7) *The Gospel History in the light of Palestine Exploration.*

Address : Geo. St. Clair, Bristol Road, Birmingham, or at the Office of the Fund.

- (2) The Rev. Henry Geary, Vicar of St. Thomas's, Portman Square. His lectures are on the following subjects, and all illustrated by original photographs shown as "dissolving views :"—

*The Survey of Western Palestine, as illustrating Bible History.*  
*Palestine East of the Jordan.*  
*The Jerusalem Excavations.*  
*A Restoration of Ancient Jerusalem.*

- (3) The Rev. James King, Vicar of St. Mary's, Berwick. His subjects are as follows :—

*The Survey of Western Palestine.*  
*Jerusalem.*  
*The Hittites.*  
*The Moabite Stone and other monuments.*

- (4) The Rev. Thomas Harrison, F.R.G.S., Member of the Society of Biblical Archæology, 38, Melrose Gardens, West Kensington Park, W. His subjects are as follows :—

- (1) *Research and Discovery in the Holy Land.*
  - (2) *In the Track of the Israelites from Egypt to Canaan.*
  - (3) *Bible Scenes in the Light of Modern Science.*
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## MEETING OF THE GENERAL COMMITTEE.

THE Annual Meeting of the General Committee was held on Tuesday, July 16th, at 4 o'clock, at the Society's Offices, 1, Adam Street.

The Chair was taken by Mr. James Glaisher, F.R.S.

The Chairman informed the Committee that he held in his hand a number of letters from Members regretting inability to attend.

The Honorary Secretary then read the following Report of the Executive Committee for the past year —

MY LORDS AND GENTLEMEN,

Your Executive Committee elected at the last General Meeting, on July 3rd, 1888, have now, on resigning their office, to render an account of their administration during the past year.

Your Committee have held nineteen meetings during the year.

The work of excavation in Jerusalem, and surveying in various parts on the east of Jordan, goes on quietly from time to time as opportunity permits.

The Committee have hopes of a Firman being granted in the course of a few months, to enable them to begin excavations on new and hitherto unexplored grounds.

Our energetic agent, Herr Conrad Schick, loses no opportunity of reporting and sending plans of discoveries in Jerusalem, which are brought to light either by excavation or during improvements or alterations in various parts of the City. Some of the recent discoveries are as follows : —

1. In reconstructing the carriage road which runs along outside the northern wall of the City, there were found further traces of an ancient wall, and a portion of the walls of a tower, which are probably the remains of the Lepers' Gate, said to have been in the north wall of the City in the time of the Crusaders. *Quarterly Statement*, 1889, p. 63.
2. Whilst some workmen were clearing the ground in the Latin Patriarch's Garden near the north-west corner of the City, they struck the foundation of an ancient wall of massive masonry, some of the stones having the same Jewish draft as those in the Haram Wall. *Quarterly Statement*, 1889, p. 65.
3. In the Russian property near the Church of the Holy Sepulchre, and east of the Byzantine pavement, a very large cave was found. *Quarterly Statement*, 1889, p. 67.
4. Between the Cave and the Church of the Holy Sepulchre an enormous vaulted cistern was discovered, measuring 102 feet long by 34 feet broad, with 18 piers resting on the rock. Over this cistern or tank a new building has been erected. The situation of this

- immense tank is nearly the same as that of the Church of St. Marie Latine, as shown on plate viii, of Count de Vogue's "Les Eglises de la Terre Sainte." *Quarterly Statement*, 1889, p. 111.
5. At Jericho, capitals, pillars, lintels, iron weapons, pottery, jars and lamps, bronze or brass trays, candlesticks, rings, &c., have been found. *Quarterly Statement*, 1889, p. 171.
  6. The excavations recently conducted at the Pool of Bethesda by the French monks, which were reported on last year, have now been dropped for a while, but will be probably resumed again soon.
  7. We have just received further reports from Herr Schick, stating that the ruins of a small Byzantine Church were found opposite the barracks off the street leading to Bab Sitti Maryam. The walls, apses, and a small altar are still preserved; the south-western corner rests on one of the twin pools.
  8. On the Mount of Olives a series of catacombs has been opened; the loculi are in groups and all connected together.  
A slab with Greek inscription, some Jewish and Greek coins, and some forty Roman tiles bearing a stamp which Mr. Schick thinks is that of the tenth legion, were found.

Herr Schumacher continues to send us reports on the various discoveries and changes in the north of Palestine. At Caesarea great changes have taken place since the Survey party measured the ruins.

A colony of immigrants from Bosnia have settled there, pulled down the old ruins, built houses and cleared and laid out the ground inside the walls in lots of one-third of an acre. Several other instances could be named where grand old ruins are being torn down for building material since the Survey was completed.

At Nazareth a large cave of several chambers was found under the convent yard of the Sisters of St. Joseph. A wide staircase leads down to the chambers in which are cisterns, troughs, and tombs. *Quarterly Statement*, 1889, p. 68.

A few days ago he sent us notes of another rock-cut tomb discovered at Shefa 'Amr, having some remarkable figures carved on the sides of the entrance.

For the convenience of subscribers in following out the position of recent discoveries in Jerusalem, a plan of the City, reduced from the Ordnance Survey Plan, was issued with the April *Quarterly Statement*, on which the recent discoveries are noted in red.

Dr. Post contributed a valuable report on the Fauna and Flora of Moab, Gilead, and the Hauran, the result of an expedition undertaken in the year 1886. The list of plants collected is a most valuable contribution to the botany of the country. *Quarterly Statement*, 1888, p. 175.

Of the three volumes we announced in our last report as preparing for the press, one is now ready and being issued to subscribers, viz., "The Survey of Eastern Palestine." This volume has been edited by Major Conder, R.E., and is accompanied by a map of the portion of country

surveyed ; there are upwards of 350 illustrations of ruins, tombs, cromlechs, stone circles, menhirs, inscriptions, &c.

Some progress has been made with the second volume, which consists of M. Lecomte's beautiful drawings, illustrating the Mission of M. Clermont-Ganneau in 1874. The illustrations for the third volume, Mr. Chichester Hart's "Flora and Fauna" of the Wâdy Arabah, are nearly ready.

The edition, as already announced by circular, is limited to 500 copies. The first 250 subscribers are entitled to the three volumes for £7 7s. On these being exhausted, the price of the second 250 will be raised to £12 12s.

Of the Memoirs of the Western Survey, the Committee are pleased to state that the number of sets remaining is now under 20. These sets have now been raised to 25 guineas.

The questions drawn up for the Committee by the Sub-Committee appointed by the Fund, for the purpose of enquiring into the manners and customs of the various peoples and tribes in Syria are now beginning to yield results. A report on the first series of answers<sup>1</sup> received will be found in the July *Statement*, in which Major Conder gives the following Biblical illustrations brought out by the replies, viz. :—

1. Worship of the calf and of trees.
2. Forbidden food.
3. Rubbing children with salt.
4. Weighing the hair when cut.
5. Riddles asked at weddings.
6. Hired mourners at funerals.
7. Rending the clothes.
8. Certain proverbs mentioned in the Bible.
9. The use of amulets.
10. Crowns worn by brides.
11. "The corner of the field" left unreaped.

*Quarterly Statement*, 1889, p. 120.

The Rev. George E. Post, M.A., M.D., of the American College, Beyrout, who is intrusted by your Committee with the distribution of the sets of questions and collection of replies, returned to Syria after an absence of 18 months in America, and is doing all in his power to promote the object of the Fund.

The Director of the South Kensington Museum having requested the removal of the objects of antiquity belonging to this Society, owing to the increasing want of space for the exhibits, your Committee have resolved upon taking a suite of rooms suitable for offices and museum, and to have the whole collection under their own direction.

Mr. Harper's new work, "The Bible and Modern Discoveries," is now

<sup>1</sup> The answers were translated from the Arabic by Capt. Mantell, R.E.

in the press. It will contain several illustrations. It gives a popular account of what the recent surveys and excavations of the Society have done in throwing light upon many passages of the Bible. This work will be issued early in the autumn.

Mr. Guy le Strange's important work, "Palestine under the Moslems," is now ready for the press. It is a description of Palestine by the mediæval Arab geographers.

Four years have been spent in gathering together the materials, and translating (from the Arabic and Persian) the various Moslem accounts of Palestine, which, beginning in the middle of the ninth century, reach in unbroken succession down to the close of the fifteenth century of our era. It is expected that the work will prove one of lasting interest; and it should be noted that nothing of the kind has ever hitherto been attempted by any other Orientalist.

The following papers have appeared in the *Quarterly Statements*:—

On the Flora and Fauna of Moab, Gilead, and the Hauran. By the Rev. Dr. George E. Post.

On Meteorological Observations. By Mr. James Glaisher.

On the Discovery of an immense Vaulted Cistern near the Church of the Holy Sepulchre; On Crusading Ruins on Mount Scopus; On the Excavations in the Muristan; On the Excavations north of Damascus Gate. By Herr Schick.

On the Discovery of a remarkable Cave at Nazareth, with chamber having cisterns, troughs, and tombs. On other Discoveries in Galilee. By Herr Schumacher.

On Altaic Cylinders; Chinese and Hittites; Speech of Lycaonia; Comparison of Hieroglyphics; Kirjath Jearim; The Alphabet; The Hebrew Months; Professor Sayce and the Hittites; The Hittite Monument at Keller; The Tell es Salahiyeh Monument; The Hittite Hat; The Stone Zohemoth; The House of the Holy Ghost; Report on the Manners and Customs; The Peasant Language of Palestine; Phœnicians; South Wall of Jerusalem, &c. By Major Conder.

On the Conduit near the Pool of Bethesda; The Middle of the World in the Church of the Holy Sepulchre; The Holy Sepulchre and Dome of the Rock. By Mr. William Simpson.

On the Site of Ebenezer. By Dr. Chaplin.

On Antioch in 1051 A.D.; The Muslim Legend on the Cave of the Seven Sleepers; Inscription in the Aksa Mosque. By Mr. Guy le Strange.

On Kirjath Sepher; Nehemiah's Wall and the Royal Sepulchres; The Broad Wall; Twin Sacred Mounts at Jerusalem. By Mr. George St. Clair.

On the Wâdy Arabah and the Dead Sea. By Professor Hull.

On the Waters of Shiloah, and the Valleys and Waters of Jerusalem. By Rev. W. F. Birch.

To all these gentlemen the Committee tender their best thanks.

The following is the Balance-Sheet of the year 1888, which was published in the April *Quarterly Statement*:—

BALANCE SHEET FOR THE YEAR ENDING  
31ST DECEMBER, 1888.

| RECEIPTS.                                       |        |    |    | EXPENDITURE.   |        |    |    |
|---|--------|----|----|--|--------|----|----|
|   | £      | s. | d. |  | £      | s. | d. |
| January 1, 1888—                                |        |    |    | By Printers and Binders  | 1,057  | 1  | 2  |
| To Balance .. ..                                | 215    | 15 | 9  | Maps, Illustrations,<br>and Photographs..  | 408    | 3  | 5  |
| December 31, 1888—                              |        |    |    | Exploration.. ..   | 283    | 0  | 0  |
| Donations, Subscriptions,<br>and Lectures .. .. | 2,079  | 13 | 10 | Stationery, Advertis-<br>ing, and Sundries                                       | 71     | 12 | 7½ |
| Maps and Memoirs .. ..                          | 380    | 2  | 9  | Postage, Parcels, the<br><i>Quarterly State-</i><br><i>ment, &amp;c...</i> .. .. | 172    | 7  | 0½ |
| Publications .. ..                              | 289    | 3  | 11 | Salaries and Wages   | 260    | 1  | 2  |
| Photographs .. ..                               | 22     | 1  | 10 | Rent .. ..   | 121    | 0  | 0  |
|   |        |    |    | Paid off Liabilities..   | 211    | 3  | 8  |
|   |        |    |    | Balance in Bank, 31st<br>December, 1888 ..                                       | 402    | 9  | 0  |
|   |        |    |    |  |        |    |    |
|   | £2,986 | 18 | 1  |  | £2,986 | 18 | 1  |

W. MORRISON,  
*Treasurer.*

The total income for the year from all sources, including a legacy of £500 left by the late Mr. Robert Mackay Smith, of 4, Bellevue Crescent, Edinburgh, was £2,771 2s. 4d., or, adding balance in bank at the end of 1887, £2,986 18s. 1d. Of this amount the Committee spent during the year the sum of £2,584 9s. 1d., of which £1,465 4s. 7d. was expended in printing and publishing results. The postage of letters, books, parcels, and the *Quarterly Statement*, cost £172 7s. 0½d.; exploration, £283.

The management, including rent, stationery, salaries and wages, £452 13s. 9½d., and liabilities paid off, £211 3s. 8d.

During the year the number of subscribers has increased by 178.

The Committee desire to again record their special thanks to the Honorary Local Secretaries for their continued assistance in helping on the great work of the Society, and to all their donors and subscribers.

We have to announce with regret that our Honorary Secretary, Mr. Walter Besant, has found it necessary, owing to the many and pressing calls on his time, to relinquish the editorship of the *Quarterly Statement*. Dr. Chaplin has kindly consented to act as editor.

The Committee regret to have to record the death of three members of the General Committee since the last General Meeting, viz., the Rev. J. Leslie Porter, D.D., President of Queen's College, Belfast, William Dickson, Esq., F.R.S.E., and Laurence Oliphant, Esq.

The death of Dr. Porter removes another from the list of the earliest supporters of the Society, and one of the most distinguished names in Palestine travel. He was the author of "Five Years in Damascus ;"



"A Handbook for Syria;" "The Giant Cities of Bashan;" and many articles in Smith's "Dictionary of the Bible," &c.

Mr. William Dickson was also a steady supporter and old friend of the Society.

The death of Mr. Laurence Oliphant is a severe loss to the Society. Mr. Oliphant took a deep and practical interest in the Holy Land; purchased an estate there, upon which he resided for some years, and devoted his great abilities to the study of the complicated social system and customs of the country, and to antiquarian researches. Important papers by him on Mount Carmel, the Jaulân, &c., appeared in the *Quarterly Statement* and other publications of the Fund.

We have to propose that the following gentlemen be elected members of the General Committee:—

Sir James Douglass, F.R.S.  
 Sir Wm. Mackinnon, Bart.  
 General Warren Walker, R.E.  
 E. T. Wilson, Esq., M.D.  
 Captain A. M. Mantell, R.E.  
 Herr B. Khitrovo.  
 Rev. C. Lloyd Engström.  
 T. B. Johnston, Esq., F.R.G.S.  
 Henry Ormerod, Esq.  
 Surgeon-General R. F. Hutchinson, M.D.

Lord EUSTACE CECIL.—Mr. Chairman, I have listened with very great pleasure to the Report of the work accomplished during the past year; though the rate of progress is slow, it is gradual and deserving of greater support. Not many societies command greater respect than this one, for the great and standard works it has done. I travelled in Palestine twenty years ago and saw sufficient evidence to convince any one that in those great mounds and ruined sites, which had remained undisturbed for centuries, something of great interest must be contained, and I quite concur in what Mr. Morrison says, that we should select a Jewish site for excavations. I had the pleasure of knowing the late Mr. Laurence Oliphant, who was so deeply interested in all that concerned the Holy Land and the welfare of its people.

I earnestly hope that the Committee will succeed in obtaining a Firman giving permission to excavate. Something may be done in that direction by getting influential people to take the matter up and give their moral support, if not money. I do hope the Society will not relinquish its work; it began, no doubt, with very little, and it now has branches all over the kingdom, and the sympathy with its objects is widely spread. We have a great subject in hand; we have a great responsibility. You who have sat in the chair and given so much of your time for so many years, are aware of that. I have great pleasure in moving the adoption of the Report.

Mr. W. H. FREELAND.—Mr. Chairman and Gentlemen, I have been



asked to second the adoption of the Report, and need hardly say that I concur in the noble Lord's remarks.

I am sure that we all deeply regret the death of the late Mr. Laurence Oliphant, and feel his great loss.

With regard to the Firman and selection of a spot for excavation. I think that we may safely leave the matter in the hands of the Executive Committee, who have hitherto directed the work of the Society so successfully, as shown by the growing list of publications, to which has been added very recently the volume on the Eastern Survey, full of illustrations. I have great pleasure in seconding the Report.

The Report was adopted unanimously.

A letter from the Rev. W. F. Birch was read suggesting that excavations be made on Ophel with the view of discovering the sepulchre of David.

The Rev. Dr. BULLINGER.—Mr. Chairman, I beg to propose the re-election of the Executive Committee; the burden of the work falls upon them. We have full confidence in them as in former years, and in their wisdom in choosing the place for excavations.

Mr. BASIL WOODD SMITH.—I have great pleasure in seconding the re-election of the Executive Committee. For economy, the great amount of work and publications for the small expenditure, we are very fortunate in having such a good working Committee. I think that we ought to encourage drawing room meetings a little more. They are particularly suited for the work of such a Society as ours.

The CHAIRMAN.—I have to thank the Committee for their attendance. I agree with his Lordship in the remarks that he has made, and I feel confident the money will come in. If we can but get a Firman, the income of the Society will surely increase. When we hear of the many buildings and relics which have been removed since the Survey of Palestine was made, how thankful we ought to be that we have them all faithfully recorded in our publications.

Professor HAYTER LEWIS.—I beg to propose a vote of thanks to our worthy Chairman for the great work he has done and his constant attention as Chairman. To him we owe a great deal for his continued support of the work, and for those valuable reports in the *Quarterly Statement* on the meteorological observations. At first sight these seem dry, but when examined carefully will be found to be of the deepest interest, and the information to be derived from them invaluable.

The Rev. Dr. GINSBURG.—I have much pleasure in seconding this vote of thanks. The Chairman inspires us all with youth, from the zeal and determination that he throws into the work in order to make it a success.

The CHAIRMAN.—My Lord and Gentlemen, as in the past, I will in the future do anything in my power to make the work of the Palestine Exploration Fund a success. I have to thank you all sincerely and individually for the manner you have responded to the vote of thanks so kindly proposed by Professor Lewis and seconded by Dr. Ginsburg.

The Committee then adjourned.

## RECENT DISCOVERIES IN JERUSALEM.

## AN ANCIENT CHURCH IN TARIK SITTI MARYAM.

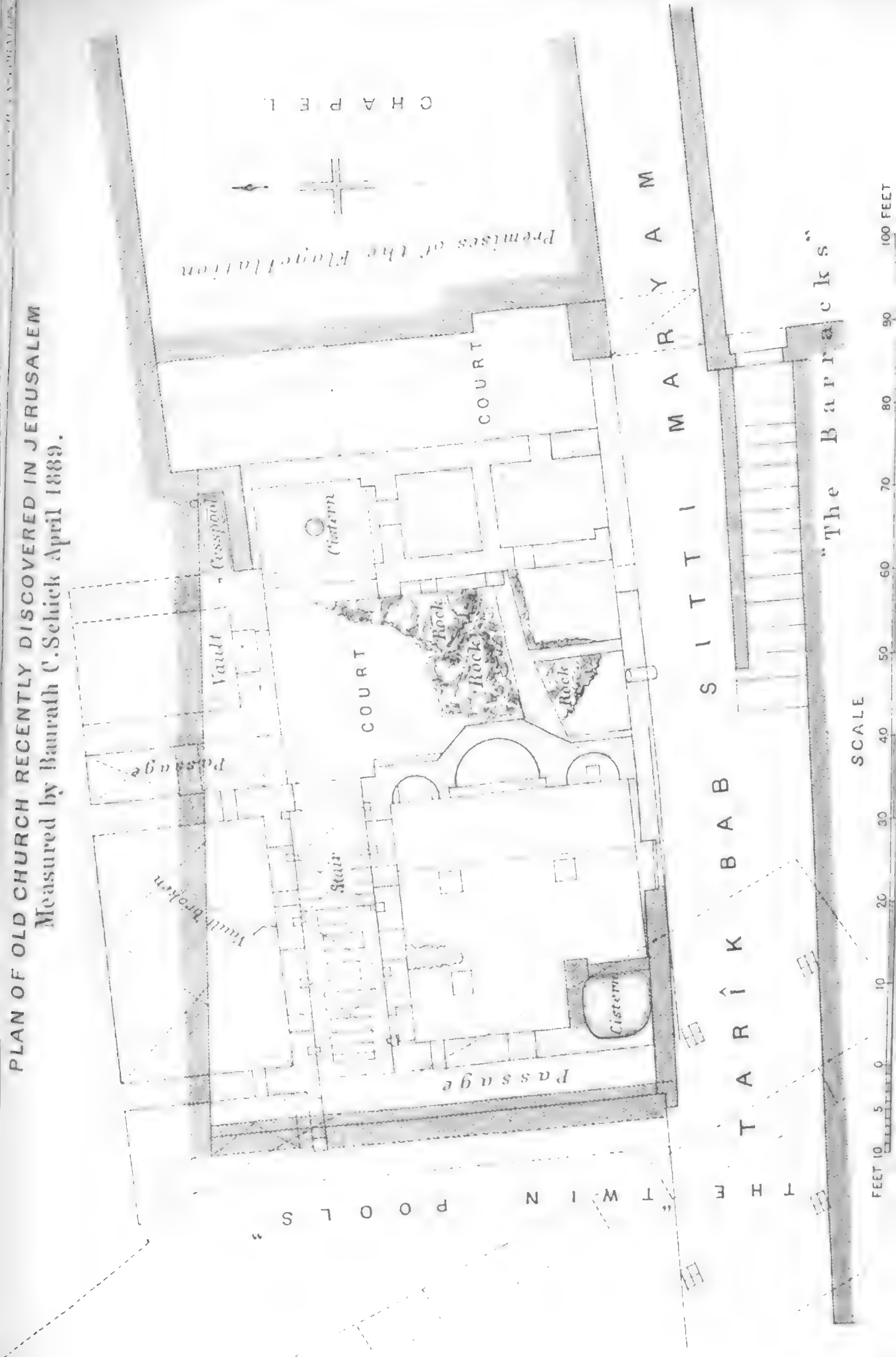
THERE was until recently east of the Sisters of Zion, and west of the premises of the Church of the Flagellation (*see* Wilson's Plan 33), an empty or waste place—*débris* covering ruins and walled up on the side next the street "Tarik Bab Sitti Maryam," opposite the stairs leading up into the barracks. Grass was growing there every year, but 51 feet backwards (north) from the street, Mohammedan houses, of comparatively modern date, are standing.

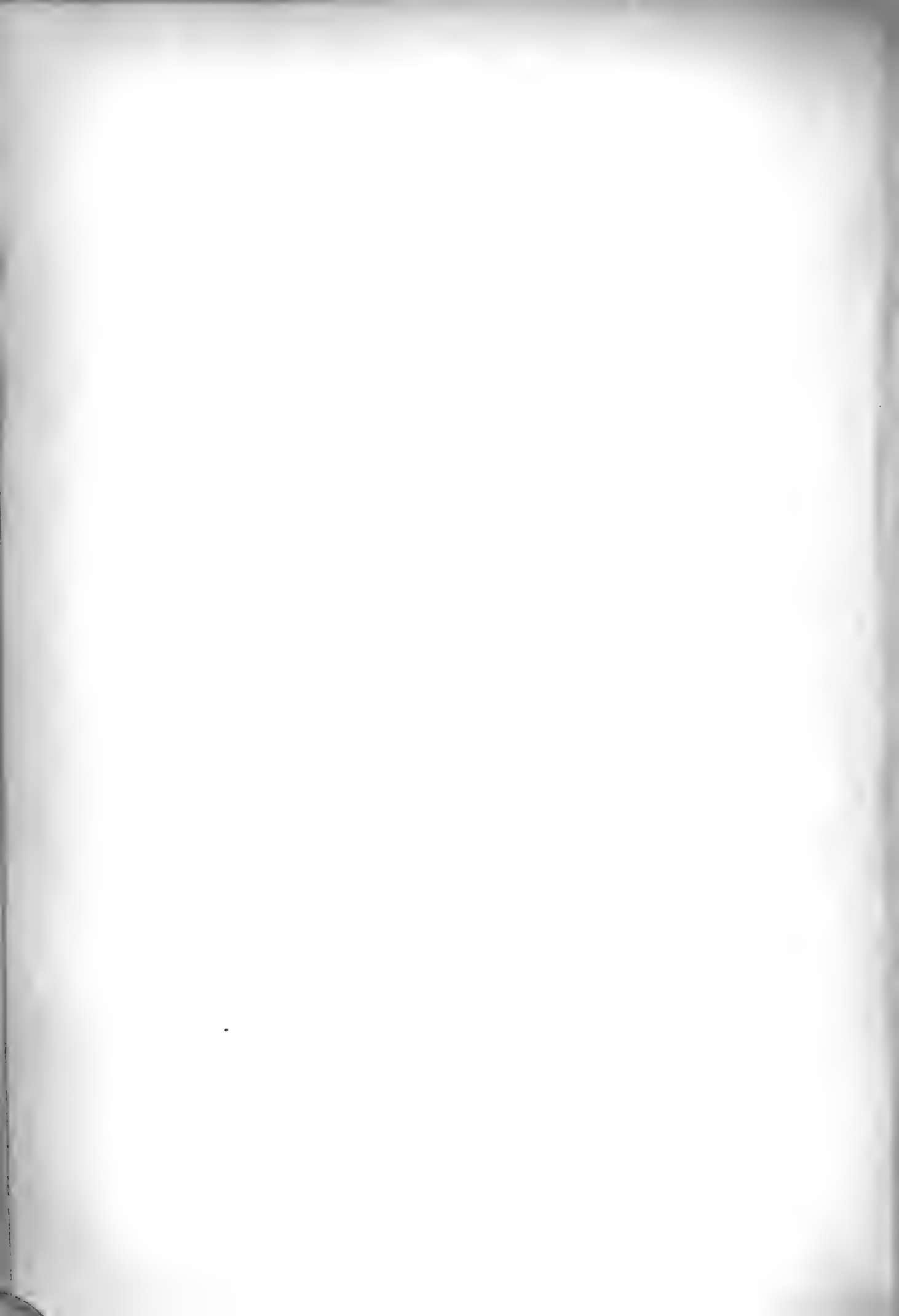
One day in April I was told that in the neighbourhood of the barracks earth was being removed, so I went there, and found that the overseer of the work was a Franciscan monk. Not knowing me, he looked very suspicious at my going over the place, giving no answers to questions in German or Arabic, but asked my guide who I was. So I left the place, and sent my man to the Dragoman of the Latin Convent, requesting him to give me leave to measure and examine thoroughly what was found, as I had seen that it was of some importance. The Dragoman sent me in return his greeting, let me know that he had to ask the *Reis* (the head of the convent), and requested me to apply the next day. We did so, and a German-speaking monk and a cavass were then sent with us that the overseer or workpeople might not create any hindrance, or behave unpleasantly. So I had full leisure to examine and measure everything. The result is as follows:—There were laid open the walls of a small church with adjoining buildings, the latter embracing a small court on which the rock looks out from the bottom. The walls of the church are still standing, 5 feet, and in some places more, high. There were towards the east three apses (as the adjoining plan will show). In the northern an altar is still existing, and the others also had altars formerly. In the southern apse the slabs of the altar are taken away, and only a kind of small cupboard remains. It is curious that the southern apse is something larger than the northern.

Of the four piers I could see only the north-western one, of very fine stones. A piece of the flooring has been uncovered, consisting of large, hard and polished stones; such are also on the strip of flooring in front of the apses, on a slightly higher level. The rest was still covered with earth, and in the south-western corner of the church is now a round-shaped cistern, its bottom on a level with the flooring of the church. It is apparently Mohammedan work of a much later date. The west wall shows marks of some alterations; one can observe two different kinds of stone, and so it is with door and windows. All of them were blocked up, but it seems that originally there was a door in the middle, over it a window of some arched-shape, and to the right and left also windows, but small and right-angled. Later on both doors and windows were blocked up, and a larger window made and left.

In front of this western wall was once a street or passage open to the sky. Further north it was covered over, and from the present spring of

PLAN OF OLD CHURCH RECENTLY DISCOVERED IN JERUSALEM  
 Measured by Baurath C. Schick April 1889.





the arch one can find the breadth of the passage as shown on the plan by a dotted line. The present passage is rather narrow, as the new wall of the building of the Sisters of Zion projects upon it. The north wall of the church has at the north-west corner a door, and it had originally three windows also, but later on was altered. Along the outside of this wall also there was originally an uncovered passage, 8 feet wide, and the opposite wall had door and windows, most of which were subsequently shut up and the passage vaulted over by four small cross vaults, their feet resting on corbel-stones inserted (new) into the wall, as shown in the plan. On account of the former windows in both walls, these corbels or brackets are not always at equal distances or exactly opposite one another, but placed on the masonry already existing.

On the flooring of the passage are lying across, at nearly equal distances from one another, six large stone slabs, which I think are tombstones. I found no inscription or marks on them. In later times this passage was used as a cesspool, so that all was very dirty when I examined it. Towards the east a flight of five steps nearly 2 feet wide leads up to a court where the rock is visible, on a level about 5 feet higher than the general level of the flooring of the church and the passage—so it is clear three or four steps are now missing.

Of the southern wall of the church I could see only a piece at the corner of the southern apse, the door where the donkeys were coming in and going out with their load of earth was there; the earth was not yet removed. Probably a door may be found in it and indications of windows. The latter is more doubtful, as the flooring of the church is only 6 feet 4 inches lower than the present surface of the street; the level of the floorings of the passages in west and north is about 10 inches higher, nearly the same as in the apses.

East of the church adjoining the street are two underground chambers. Their vaults are destroyed, and on their floor the rock rises up. Possibly other rooms may have stood on these underground chambers; but I doubt it, as there is lying in the modern wall the shaft of a pillar and the opening of a former gate, which very likely led immediately from the street to the court inside. East of this and of the court there are two rooms whose vaults have also fallen down, and north of them is an open space (formerly covered) with the mouth of a rock-hewn cistern full of water, further north of which is a modern cesspool for the neighbouring house. East of all this a kind of court has been cleared, and towards the north a great many stones are piled up. Then comes the wall of the premises of the Flagellation Church belonging also to the Franciscan brethren.

North of all this there were two larger rooms, the vaults of which are in great part fallen, but as a passage between is preserved one can measure how far these rooms went northwards, and observe that they are now half under the modern Mohammedan houses.

Although this newly-discovered church is only a very little one, still its existence, situation, and surroundings are of interest in many ways. It is interesting that a church was built so very near to that of the

Flagellation, midway between the latter and the Ecce Homo arch. What event of our Lord's sufferings or deeds may the builders have fixed here? I have no answer! It is also interesting, that this little church stands partly on the eastern of the Twin pools; and that just there was made later on a cistern *over* it, although a mouth of the pool below was near at hand. It is further interesting that now it is confirmed that east of the Twin pools there is no ditch or pool, and that the rock rather rises towards the east.

Several questions may be settled whilst the work of clearing the place is going on. But on the very day when I made the measurements, the 13th April, the work was stopped, and it has not since been resumed.

I had to give a copy of the plan to the Superior of the Convents, and when anything new is discovered he will allow me to examine and measure it, and so improve the plan. This is the reason why I could not send it earlier.

C. SCHICK.

## THE MOUNT OF OLIVES.

Whilst the topography of the Holy City is in so many points doubtful, and a good deal of controversy on the real sites of places, walls, &c., has arisen, "Mount Olivet" alone is an exception. Everyone agrees that the Mount of Olives of Scripture is identical with the present "Jebel Tôr," east of Jerusalem, beyond the Kedron Valley, overlooking the City. The only question that can arise is, whether the whole range of the hills or only a part of them is included under the name? To make this question clearer a plan is appended of the whole ridge, which is commonly understood when the expression "Mount of Olives" is used, because it is *one* mountain.

If one looks to the mountain ridge itself, or examines this plan, it will be observed that the ridge is divided into *three* parts—*a. Mount Scopus*, on the north (I); *b. The real Mount of Olives*, in a stricter sense in the middle (II); *c. The Mount of Offence*, on the south (III). But the *centre-piece*, marked II, is also divided into *three* heads. The middle one, marked 1, has a double top; the eastern, which is the highest, now bearing a Russian Church and Convent, with a very high belfry, besides a Mohammedan Dome or Wely; and the western top, bearing the Village "Et Tôr" and the Church of the Ascension. The southern head, 2, is occupied by a French lady, who has built the Church of the Credo, a convent, and the "Pater noster," which is a kind of "campo santo," having cloisters surrounding an inner court. The northern top, 3, is called "Kurm es Saiad" = Vineyard of the Hunter, a modern name, but the old traditional name is "Viri Galilæe." It has been recently bought by the Greek Bishop Epiphanius, who has made some excavations and found things of which I will report in due course. In every age, even from very ancient times, the Mount of Olives was always more or

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We learn from the old Rabbis, that as the City of Jerusalem itself became too small for all Israelites at the great feasts to be able to eat their offering meals *in* it, as was ordained by the law (the *Camp*, meaning in later times the *City* of Jerusalem), a tract of ground outside the City was *sanctified* and *added* to it, and being regarded as *belonging to the City*, although outside the walls, was in dignity the same, *i.e.*, belonging to the *Camp*. It was on the *east* side of the town that such addition was made, from the wall eastwards to the Valley Kidron, and the slope and top of the Mount of Olives unto Bethany. This means, the *middle part*, marked II on the drawing, leaving out Scopus on the north and the Mount of Offence on the south. Within this holy circle the village Bethphage was situated, and within it took place the Ascension of our Lord.

The feet of our Lord very often stood on Olivet (*see* St. John viii, 1, 2, and Luke xxi, 38); on one of its rocks he sat looking westwards over to the Temple, and spoke of the destruction of Jerusalem, &c. (Matthew xxiv, 3; Mark xiii, 3). Over this part of Olivet he came to his glorious entry into the City as King (Matthew xxi, 1; Mark xi, 1; and Luke xix, 29, 37, 41). At its foot he endured in Gethsemane deep sufferings of soul; from one of its tops, or near to one of them, he ascended triumphantly to heaven (Luke xxiv, 30; Acts of the Apostles i, 9-12).

After these events it is very natural that in Christian times also this Mount of Olives and its sites were kept up and much venerated; so we find there, in course of time, churches, convents, and other similar establishments, and also tombs of various nations. During the Mohammedan occupation nearly all these have gone to ruin, and it is only within the last three decades that much has been built up again, principally by Christians. Thirty years ago, besides the Moslem village, "Et-Tôr" (which has since been greatly enlarged and improved), there were only some olive trees, a few vineyards, and on the highest top the Moslem burial ground with a small dome or Weli, and near to it the threshing floor. Much of the ground has since come, by purchase, into the hands of Christians. The greater part of the middle, or chief top, now belongs to the Russians, who have excavated the ground and found tombs with very fine Mosaics over them and Armenian inscriptions. They also discovered the foundations of a church, which they have built up again on the same place and of the same dimensions and style. They have also built lodging-houses or small convents on old foundations, planted many trees, and above all erected a very high, square-shaped belfry, standing alone, with very many bells of various sizes, amongst which is one very large. The tower bears a gilded cross, which shines very far round about into the country. On the western slope, near Gethsemane, about one-third up the height, the ground has also become Russian property, and there has been built an entirely new church in the pure Muscovite style, with seven towers, surmounted by onion-shaped domes and crosses above them. It is a very costly building, and looks strange in this neighbourhood, where there is nothing else of the kind.



The southern top, marked 2, is occupied by the Roman Catholics. A French lady bought the greater part of it, and two churches are being built, also a convent for nuns of the Carmelite order, some other buildings, and a fine "Campo Santo"—i.e., galleries in which are the Lord's Prayer in 24 languages extending round an inner court, with the tomb of the lady. A boundary wall has been made round the property, and trees planted and gardens laid out. East of this, where the middle top is connected by a narrow pass with another hill more to the east, on the eastern brow of which the village of Bethany is situated, were discovered some years ago some old foundations of a former church, with the celebrated "Bethphage" stone (see *Quarterly Statement*, 1878, page 51, or the "Jerusalem Volume of the Survey of Western Palastine," pages 331 to 340). The property was afterwards bought by the Roman Catholics, and the church is built up again, and a house for a watchman. There are many rock-cut tombs of the Christian time in the neighbourhood, and a little to the north there is a vineyard on the site of a former town or village. In tilling the ground, not only have stones come to light, but also pieces of marble and marble pillars, mosaics, cisterns, and water channels; also two open pools have been discovered. This place should be more systematically excavated. I consider it to be the village from which the disciples brought the ass (Luke xix, 30; Matthew xxi, 1, 2), leading it to the road going towards Jerusalem at the above mentioned pass, where the Bethphage stone now stands; for Jesus himself went not into the village, but only the two disciples, who brought from it the ass. Anyone coming up from Bethany, or leaving Bethany on the right hand, and coming through the vineyards, would have the site of this ancient village or town "over against" him.

The "*Kurm es Saiad*" or "*I'iri Galilae*" is the northern hill of the real Mount of Olives. Two pillars are standing on it in memory of the two men who appeared "in white apparel" to the disciples after the Ascension of our Lord, and said, "Ye men of Galilee, why stand ye gazing up into heaven?" (Acts of the Apostles, i, 9-11). From this (according to the tradition) the name of the mountain originated, but I think the name is still older. As pointed out above, when the people of Israel came together at the great feasts, a good many encamped outside the town, and the Galileans made their camp on this mountain, as those from the other provinces, and from foreign countries, took their places on the middle and southern mountains. After the Resurrection of Christ, mention is made of "Galilee," and of a "mountain" in Galilee, where the disciples were to see Him, and on that mountain in "Galilee," according to Matthew xxviii, 18-20, the last words uttered by our Lord were spoken; they are nearly the same as those recorded in Acts i, 6-8, as having been spoken just before His Ascension on *Mount Olivet*, so that very likely this mountain may be meant, which would not debar His appearing also to His disciples in the *country* of Galilee itself, as we know from John xxi, 1-14, that He did.

The Greek Convent in Jerusalem having long had some share in the

ownership of the vineyard, their Bishop Epiphanius, about ten years ago, bought all the property and enclosed it with a new wall, which is 3,500 feet long. The top of the hill is, to a considerable extent, flat, and slopes off in every direction. The piece of ground is not an exact square, but has crooked boundaries and sides of different lengths. Its shape and position are shown on the plan, which has been reduced from that of the Ordnance Survey.

Except a number of olive and fig trees, a low mound with a cistern beneath, and the two pillars above mentioned, nothing was on the place. The vines had been rather neglected. The pillars were standing in the open field; they seem to have been *expressly made for the purpose*, not intended to receive a capital or to support anything, simply to fix a spot for remembrance. Their average diameter is 15 inches; they are round, each with a cross in relief on its side, and at the top are some not very neat or classical mouldings all round; they are of the native hard reddish stone, and from the present surface of the soil 2 feet 8 inches high. Probably they go down 3 or 4 feet, to the original surface of the ground, having been, when put up, pillars of about 8 or more feet high. It would be interesting to ascertain their real height, and the old *flooring* round about, which, I think, will be found to be paved, or of mosaics, perhaps with inscriptions. When the boundary was made, the mason went straight on, by which the pillars were left *inside*, and in the possession of the Greek Bishop. But the other Christian denominations, especially the Roman Catholics, became irritated, and the Government had to settle the matter. A narrow lane, 10 feet wide was made, so that the pillars are now outside the Greek property, and pilgrims of any denomination may visit them without hindrance if the door is open. The key is kept by a Moslem, who built some houses on his own ground in the neighbourhood of the pillars. These houses are now rented to Russians, and the door is always open.

#### (a.) The Bishop's New Buildings.

Three entrances have been made in the new boundary wall, and inside roads leading to them laid out. The entrance in the west is just opposite the city, and a new road leads up to it, branching off from the old road a little above Gethsemane, and going up in a serpentine line as indicated on the plan; inside the ground rises as far as the cistern, which is situated at the highest point. The chief entrance is towards the south, not far from the "pillars," in the neighbourhood of an old cistern. It has three gates, a large centre one and a small one on each side; the large one is opened only on festival days. On each side of this entrance is built a square room, one used at present by the gatekeeper, and the other as a temporary Greek chapel until the permanent one is finished, when it will be used as a museum for the antiquities found on the property. At the north-eastern corner another large entrance has been made, and a small residence for the Bishop and his servants, together

with a stable for animals, &c., also a new cistern. As this point is already on the slope towards the east, it affords a marvellous prospect over many mountains and valleys, the Jordan Valley, and the Trans-Jordanic land. In front of this entrance the main road from the village Et Tôr northwards runs on the top of the hills to Mount Scopus, to the villages 'Aisâwîyeh, 'Anatâ, and others, and to the Sultaneh road to Nablûs.

South of the Bishop's residence a good many rock-cut tombs were found, which may be called *catacombs*. Also near the southern corner, tombs were found, and a new Greek chapel has been erected there, measuring inside only 20 feet by 14 feet, having a door on one side and windows on the other, and covered with a dome. The outside, towards the north, is decorated with a Greek inscription.

Many trees have been planted and terraces made, and in many places old foundations were worked through. It was found that there is now a layer of earth 6 feet, and in parts 7 feet, deep, above the former surface of the ground.

During the progress of these works many discoveries were made which I will now describe.

(b.) A "Campo Santo," or Christian Burial Place.

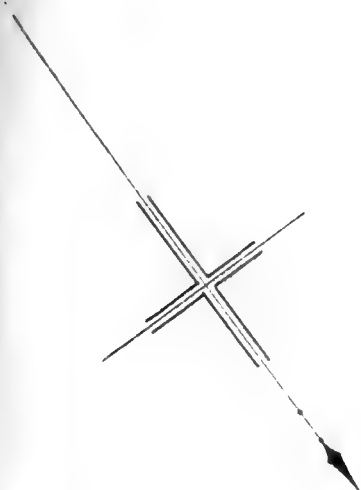
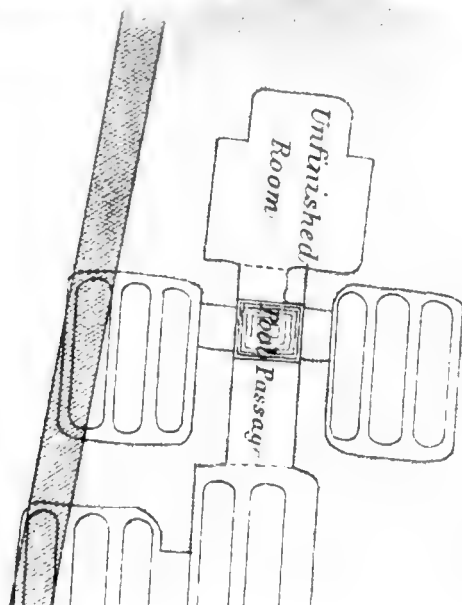
Near the southern corner, 7 feet under the present surface of the ground, were found remains of walls, pillars, shafts, and capitals of the Corinthian order, a base still in its original situation, and near the walls, with which they form an angle, 15 Christian *tombs* of a high class were found in rows of five. There is first a flooring or pavement of stones, under that some *earth*, and then other stone slabs. When the latter were removed, they were found to be the lids or coverings of single graves, built of masonry. In them were found little bottles and similar things, and there were crosses on the covering stones. A good deal of mosaic flooring was also found, where there is no stone pavement, especially under the new chapel. At the south-western corner of the latter a tablet, all in mosaic, was exposed, with a Greek inscription, of which I give a copy one-tenth of its real size (No. 4). I give also drawings of three Christian tombstones; the crosses on them are on one in relief and on two engraved; two have Greek inscriptions,<sup>1</sup> as shown in the drawing. From all this it is clear that in the Byzantine time a Christian burial place existed here, covered (at least partly) with roofing supported by marble pillars of artistic design. The extent, or form, cannot be ascertained until the whole is cleared.

<sup>1</sup> These appear to be early Christian texts, with Greek crosses, as far as can be judged from the copy; the word *Μνημα*, "Memorial," occurs on 3a and 3b. The text No. 4 is evidently Byzantine, and seems to be the tomb "of Thy servant Anna."—C. R. C.

## (c.) Catacombs.

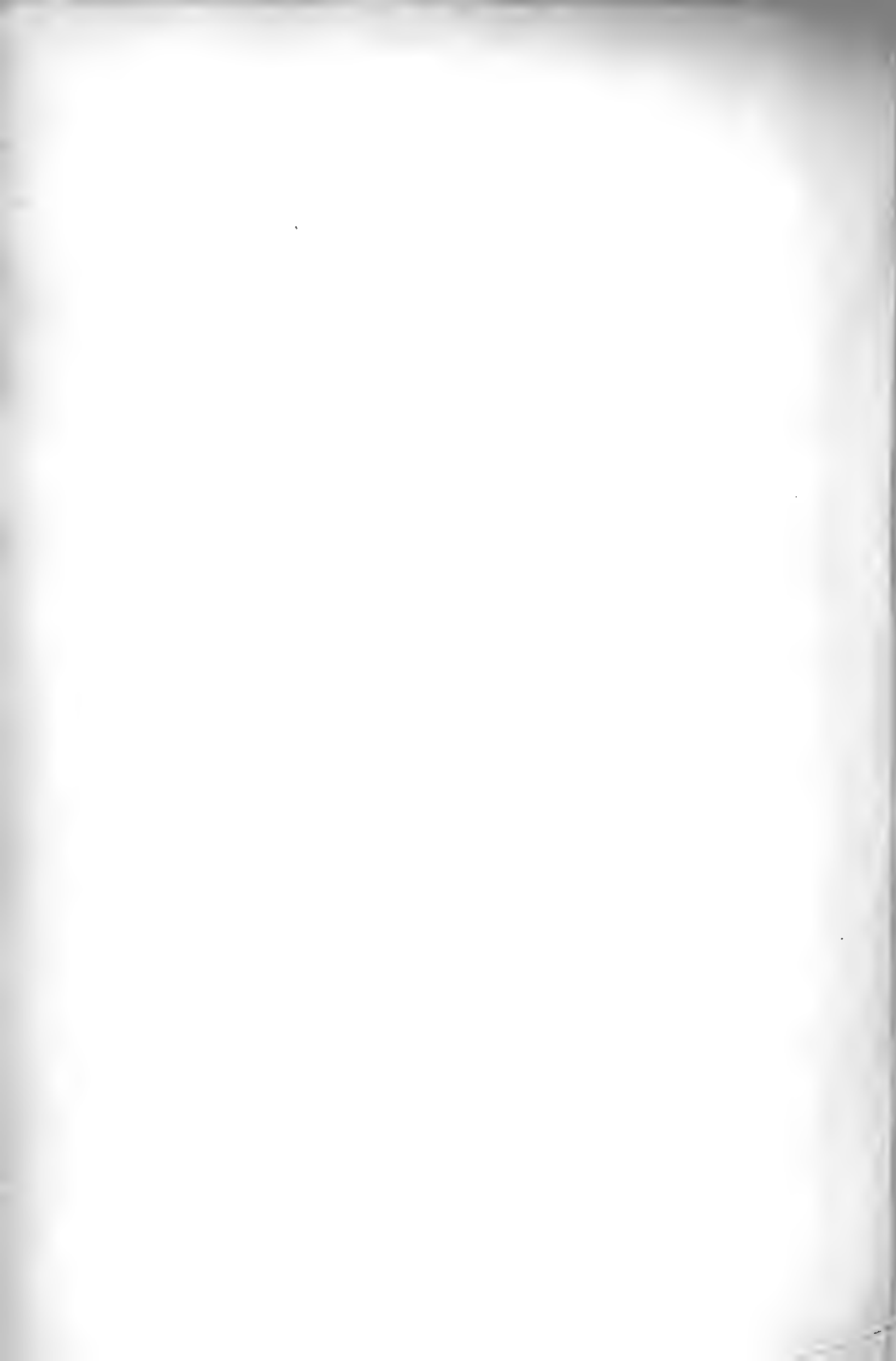
Of these I present a rough plan, and have first to remark, that these excavations are all hewn in the rock, but the rock being of a soft nature, and of a sandy structure, and becoming wet and dry again year after year for many centuries, they have suffered greatly, as small particles are falling off every year. The edges are no longer sharp, and hence measurements and bearings cannot be taken with the exactness one could wish. Further, when the new boundary wall which runs in several places over these excavations was made it wanted foundation, so the excavations were walled up, or some unsafe parts of rock broken away, and new and good masonry put in. Moreover, in thoroughly clearing out the excavations for convenience sake they were made in some places a little wider or higher, so that the workmen might stand, and in consequence of all this, a plan may give a good idea of the whole, but will be far from representing exactly the original state of things. Apparently there were originally three groups of ancient Jewish rock-cut tombs, which later on were partly altered and used again by Christians, and at the same time many new caves and tombs were excavated.

The present entry to these caves is a hole, broken into the roof of a large room, where one has to descend about 15 feet. The old entrance is now walled up, it is in the north; a square hole, 2 feet wide and 2 feet 4 inches high, exactly as all the Jewish rock tombs have. A few steps lead into a Jewish room, 15 feet long and 13 feet wide, and  $6\frac{1}{2}$  feet high. In the flooring is a kind of pool 2 feet 8 inches deep, 5 feet wide, and 7 feet long. On the side walls of the room are, towards the west, two ordinary *kokim*; towards the east also two, but very wide ones; towards the south, two of the usual ones, and another originally of the same size, but at a later period (very likely by Christians) enlarged, and its bottom made  $3\frac{1}{2}$  feet deeper, so that a second, but small, room, was created. From this on the east, an opening leads into a cave with three Christian tombs, or rather graves. On the south is one *loculus*, and on the south-east an opening leads to a kind of passage. This was originally a square Jewish chamber  $6\frac{1}{2}$  feet wide in each direction. In its flooring are cut three Christian graves, and on the east is a small regular Jewish chamber with two *bench graves*, i.e., a bench on which the corpse was put, one on each side of the passage, which went further eastward, but is now walled up. There is here a hole in the roofing, and consequently some daylight. In the corner of the square room one tomb (*koka*) runs obliquely into the rock. A kind of doorway leads from this chamber to a passage going in a nearly straight line southwards as far as the end of the excavations. On its right side there is a cave, accessible by a kind of doorway, with four Christian tombs, and to the left, first a flight of steps, and then an opening to a cave with three Christian graves parallel with the passage. Going on in the latter there is on the right side an open cave with three Christian graves at right angles to the pathway; then in the flooring of the latter is a pool about 5 feet long, 2 feet wide, and a little more than 2 feet deep. On the



PLAN OF THE NEWLY DISCOVERED "CATACOMBS" ON THE TOP OF MOUNT OLIVET  
 Examined and Measured by Baurath C. Schick, April 1889.





right (west) of it is an unfinished cave, and to the left (east) a cave with three Christian graves. Further on there is on the right a square cave with two very wide graves, or troughs, probably Jewish, and to the left a real Jewish chamber with two bench tombs, the passage between them going eastward into another small chamber, which originally had a hole in its roof.

Proceeding along the pathway southwards, there is on the right hand an open cave with three Christian graves, from the northern of which an opening leads to another. On the left side of the road there is first a flight of steps leading up eastward, and from it another stair leading down southward to a number of Christian graves; I counted seven, but the wall towards the west is broken, and when creeping through, one comes to five other Christian graves, and passing over them westward comes up by a few steps into the pathway again. Passing southward through a kind of gate, one comes to a widening of the roadway, and has to step over graves hewn in the bottom; first over one situated across, then over two rows or sets of three each, parallel with the pathway. From the southern row, a wide door opens eastward to a cave with five Christian tombs, placed in the same way as the former. Towards the west there are none, but simply the rock wall.

Then comes again a pool in the flooring of the passage, to the left a flight of broken steps leading to a cave, and to the right (west) of the pool there is a wide opening of a cave with four Christian graves. Going on still, in the passage one has to step again over Christian graves; first over two lying across, and then over two very long ones (the longest in the whole catacombs) parallel with the passage. To the left (east) of them there is a cave with three Christian graves lying in the same direction, and on the right (west) side, only rock. The passage now becomes narrower, and one comes to another pool, a small one, with the usual depth, but under 3 feet wide in each direction. To the right and left of it are openings into caves, each of which has three Christian graves. Then opposite the pool is rather a narrow door leading into a chamber, apparently not finished and without any graves, and here the catacombs come to an end.

From this examination of these remains it appears—

(a.) That the tombs are of two distinct kinds, namely, Jewish and Christian. Running through the whole Jewish system there seems to be an idea of singularity, each tomb or grave is for one person, separated from others, and if ever two are found together there is a passage between them, and so no real connection, whereas in the Christian tomb the idea of brotherhood, one belonging to the other, is very striking. Through the whole goes the idea of community.

(b.) It is striking to find the number three so often. It seems to have been the rule to put three graves together.

(c.) One gets also the impression that they utilised space as much as possible. Straight lines and symmetrical effect they had not at all in view, simply usefulness; of beauty there is none.



(d.) One sees also that they were not particular as to the direction in which the corpses had to be laid. It is now the endeavour to put dead bodies in such a way that they may look eastward to the face of Christ, when coming from the east, as the sun rises, the "sun of righteousness" being Christ.

(e.) If there were any inscriptions on the walls they have become obliterated. I found none; but in several places crosses were chiselled on the walls.

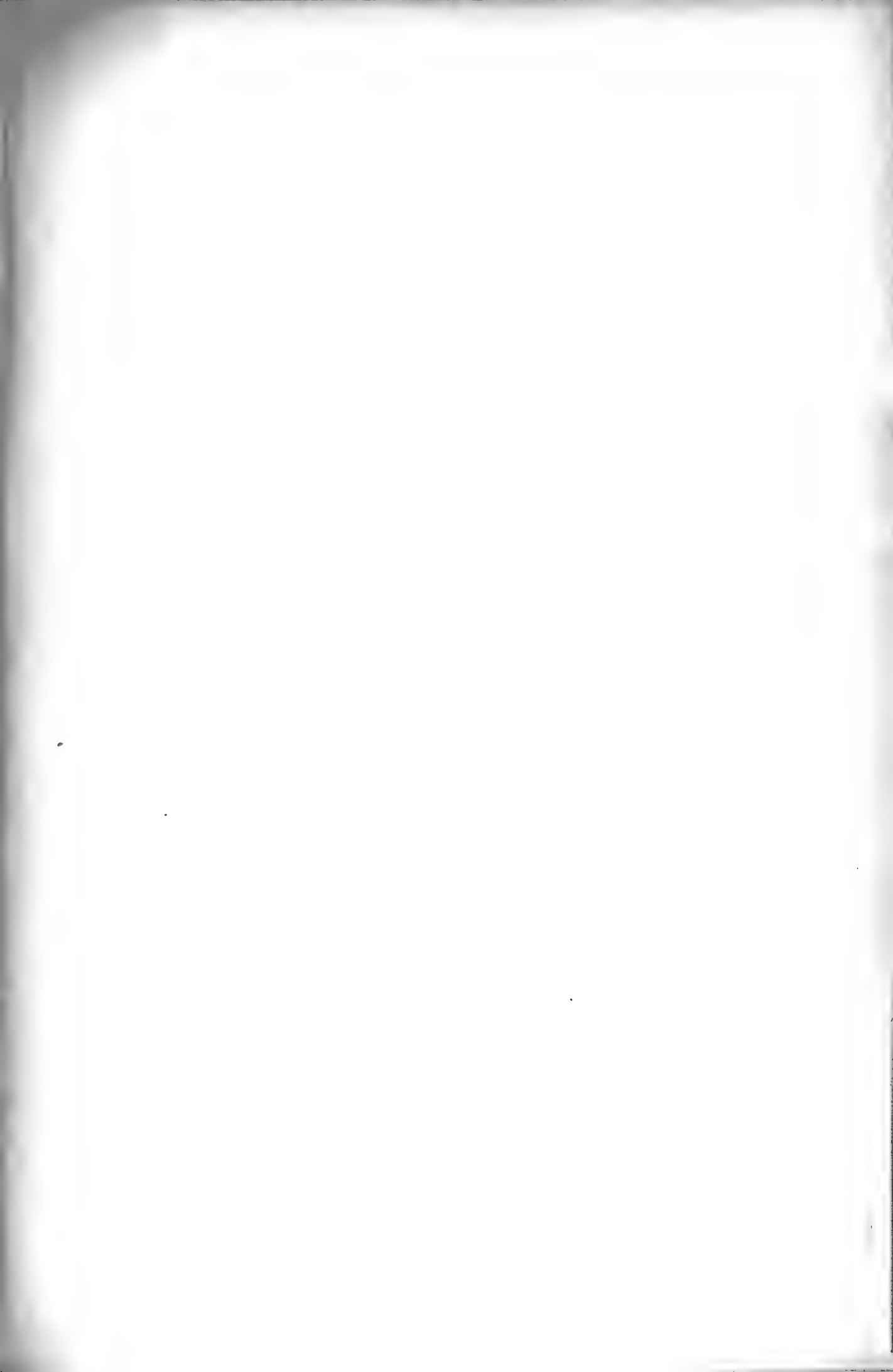
(f.) The "pools," I suppose, were made to gather the water coming down into these caverns or tombs in the wet season, in order that the tombs and the pathway might remain dry.

I have still to add that there is in the large (Jewish) room, along two sides, a trench  $2\frac{1}{2}$  feet wide and nearly the same deep, apparently constructed at a later time.

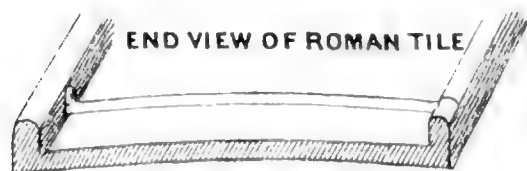
(g.) Similar Christian tombs are found elsewhere in the neighbourhood of Jerusalem, especially on the Mount of Olives, but always a single group of three to seven graves. This excavation is the most extensive of the kind, and as the tombs are for the most part Christian, I give them the name of Catacombs.

As there were found in this excavation a good number of Roman tiles, of the time of the destruction of Jerusalem by the Romans, the Greek Bishop thinks it may be the "Peristereon" mentioned by Josephus, Bell. v, xii, 2, where he says, in describing the circumvallation of Jerusalem: "From the lower parts of Cenopolis it went along the Valley of Kidron to the Mount of Olives; it then bent to the south, and encompassed the mountain as far as the rock called Peristereon, and that other hill which lies next it, and is over the valley which reaches to Siloam, where it bended again to the west."

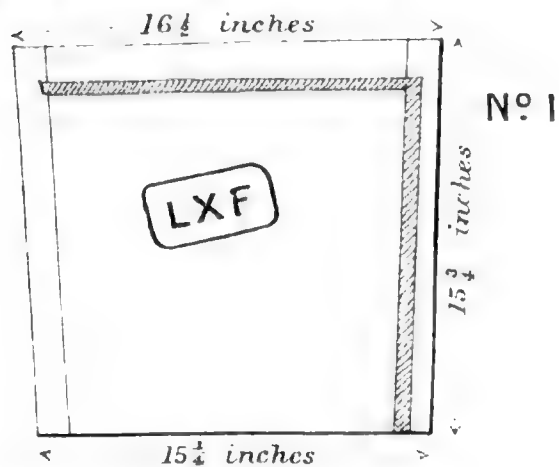
Now, as the Greek word "Peristereon" is generally translated in the Latin Columbarium, and the latter word means, in the first place, a pigeon house, and is here spoken of as a rock, some have applied Josephus's expression to the rock at the threshing floor of the village Silwan, just where the village on the north begins. But if applied so, all the rest of the expression becomes unintelligible. "Peristereon" has accordingly been looked for higher up the mountain and more to the north. Dr. Schulz takes it to be the "Tombs of the Prophets," as the word "Columbarium" means not only a pigeon house, but also caves with many excavations for dead bodies, or urns with the ashes of burned ones. But even the tombs of the prophets seems to be situated not high enough or far enough to the north, as near the "Peristereon" the bending of the wall took place from an easterly to a southern direction. On the other hand, everything becomes intelligible if the newly discovered catacombs are taken to be identical with the "Peristereon," for then the whole western slope of Mount Olivet will be embraced, and the wall would come to (or near) the camp of the 10th Legion "six furlongs from the town at the mount called the Mount of Olives" (Bell. v, 2, 3). This camp itself formed part of the circumvallation, and no better place for



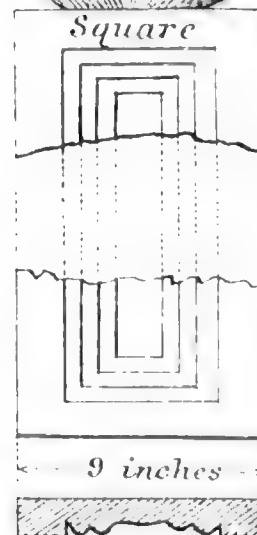
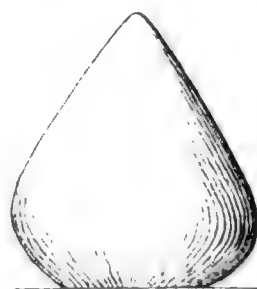
ANTIQUITIES FOUND ON MOUNT OLIVET IN THE PART CALLED VIRI GALILAE.  
Measured & Drawn by Baurath C. Schick - April 1889.



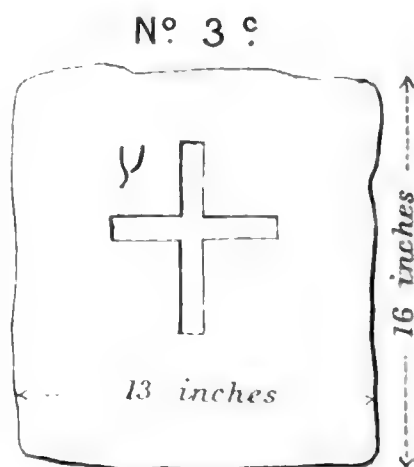
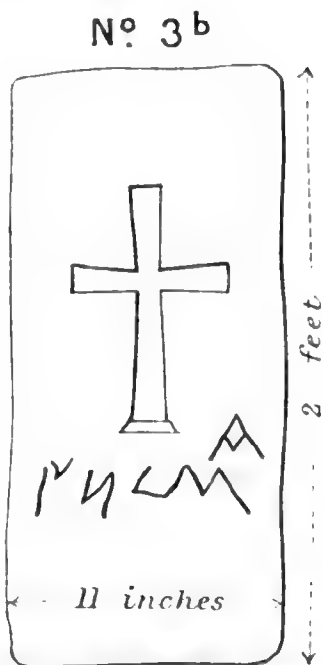
PLAN OF ROMAN TILES



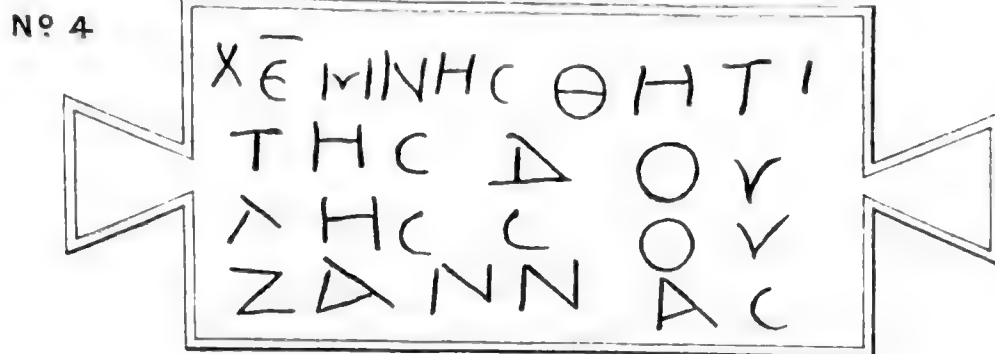
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SQUARE PILLAR OF MARBLE (WHITE)



ON MOSAIC FLOORING AT CAMPO SANTO ON MOUNT OLIVET



the camp could be found than the top of "Viri Galilæ" mountain. So the idea of identifying these catacombs with the "Peristereon" has some good ground on which to rest.

It may be objected to this identification, that the catacombs are the greater part Christian, and hence could not have existed at the time of Josephus. But to this it may be answered that there were certainly Jewish excavations before the Christians did anything, and the Christians only modified and enlarged these, which may very well have been done in the 37 years between the Ascension of our Lord and the siege of the City by the Romans. That the Ascension had taken place somewhere on Olivet made this mountain a hallowed place for the Christians, and very likely they got access to and utilised these old Jewish tombs which had already become profaned and polluted by the Roman soldiers, their hated enemies, being buried there.

(d.) Antiquities found on "Viri Galilæ."

In clearing the catacombs, digging foundations, planting trees, etc., many old relics were found, of which the Bishop has made a collection. Besides a number of coins with Greek inscriptions, and of late date, there are also some from the Jewish time, amongst them a genuine half shekel. There were also found a great many small stone cubes for mosaics, some small ornaments of silver, iron nails and rings, hooks of copper, &c. ; also various vases, capitals, shafts, &c. of marble and other stones, pottery, pieces of tiles, and so on.

Roman tiles (No. 1) were found as coverings of graves in the catacombs, 42 pieces in all. They are, on an average, about 15 inches square, but  $1\frac{1}{4}$  inch narrower at one end than the other, so that the narrow end of one can be put into the wider end of the other, they have, like the modern French tiles, raised and curved edges. The most important thing in connection with them is a stamp made in the clay before being burned of the Roman letters L X F, in some instances L X F R E, meaning the tenth legion called Fretensis.

The tiles have a whitish appearance arising from sand having been strewn on them whilst they were still soft, the inside, or clay itself, is more red, and the tiles give a good sound when struck.

No. 2 represents pieces of white marble, belonging to a square post, the middle piece wanting, so that the length (or height) of the post cannot be told. It has on two sides the remarkable mouldings, which are so frequent on such pieces, and which are still found on posts in the Haram Es Sherif, and on a larger scale on the inside of the so-called Golden Gate. They seem to me a Jewish ornament, and I think such were on the piers or pilasters on the outside of the Temple itself, which the Talmud<sup>1</sup> compares to "waves of the sea."

The posts have in general on one or two sides, grooves into which were

<sup>1</sup> Beth Habbecherch, I, 14.

put stone slabs to form low partition walls. The cone-shaped top or head of these posts must have been a very favourite form with the Jews. As it is found so often, I think it represents in some degree the cap of the high priest, as the Oriental Arabic-speaking Rabbis have even to this day a similar one.

No. 3 shows three tombstones: (a) with an inscription in Greek; it has a cross in relief, as shown in the drawing; (b) is a similar one, but the cross is not in relief but engraved; (c) the same, but bearing only one letter.

C. SCHICK.

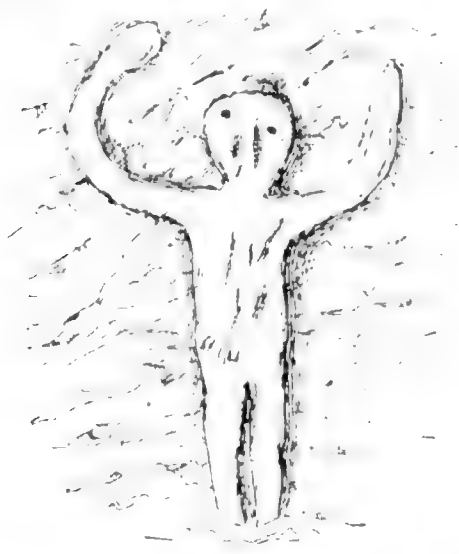
### CURIOUS CAVE AT SARIS.

Some time ago M. Henri Baldensperger, of the well-known French bee-keeping firm of Baldensperger Brothers, who own an apiary near Saris, called on me, and in the course of conversation told me that some fellahin of the village of Saris had quite recently, whilst cutting firewood, discovered a cave in which were sculptured human figures.

Noticing the interest he had awakened, M. Baldensperger invited me to join him on a visit to the spot. I was yesterday (June 6th, 1889) able to avail myself of this kind invitation, and the following brief notes on the discovery may interest readers of the Palestine Exploration Fund's *Quarterly Statement*:—

On the hill to the south-west of Saris is a small pine grove called El Arb'aïn, which, like its sister grove at the shrine of El 'Ajamî, is one of the last relics of the forests which in ancient times covered this part of the country. From El Arb'aïn a bridle-path leads westward, and at about one-third of a mile distant runs along the top of a rock terrace, the edge of which is fringed with bushes. In the face of the low cliff behind these bushes is a hole by which we gain access to an artificial cavern 10 feet square, and at present from 3 to 4 feet high from earth-covered floor to flat ceiling. The entrance is at the eastern end of the north wall, and exactly opposite, in the south-east corner, is a rectangular hole or pit, lying east and west, 5 feet long and 2 feet 10 inches wide. It looks very much like the lower pit in the rock-cut wine-presses which are so frequently met with on our Judean hillsides. The walls of this pit or trough, which is almost full of earth and dried bones, rise from 3 to 4 inches above the floor, and are from 6 to 8 inches thick. In the centre of the north wall there is a channel cut just like those in wine-presses. The fellah who first showed the place to Mons. B. told him that there was writing on the top of these walls, but that a fellah who had dug in the cave in hopes of finding treasure, in his disappointment defaced it, lest it should reveal the exact spot to some more instructed and fortunate seeker. I noticed some marks or characters (?) here, which I copied.

About the centre of the east wall of the cave, which wall, being more exposed to the weather than other parts of the chamber, is much broken, is a rudely carved human figure in relief. The length of the body, including the head, is 14 inches; distance between elbows of uplifted arms, 9 inches.



cluding the head, is 14 inches; distance between elbows of uplifted arms, 9 inches.

On the northern wall at its western end, near the corner, is another figure, also with uplifted arms. Length of body, seen between present surface of floor and top of head, just 1 foot; between the elbows, 7 inches. The legs, if it has any, must be dug for. We had no digging tools with us.

Excavation may show another trough in this corner. The whole place is dug out of the *nuri* rock, which is soft to work, but becomes hardened by exposure to the air. I broke a fragment away from the eastern wall, and found it very hard.

Leaving it to others to fix the age of this cave, I would only remark that, judging from the way in which the figures stand out from the walls, I believe that they were cut at the same time that the cave was hewn out.

We saw no trace of cistern cement in any part of the chamber, nor could we find traces of a wine-press either on the terrace above or on that just outside it. Excavations may reveal more.

J. E. HANAUER.

## INSCRIPTION AT BEIT EL KHŪLÎL.

On August 1st, 1889, I for the first time visited the mysterious ruin on the plateau about three miles north-west of Hebron, known as "Ramet el Khŭlîl," or "Beit el Khŭlîl."

It was about 6 p.m. when we entered the place through a gap in the western wall, and watered our horses at the troughs at the north-west corner of the platform that surrounds the beautifully-constructed Roman

well in the angle formed by the southern and western walls, which are the only parts of the building still existing. Whilst doing so my eye fell on a stone in the southern wall. It was lit up by the slanting rays of the declining sun, which revealed traces of an old inscription on it, and on two other stones immediately east of it projecting from the southern wall. I had unfortunately nothing with me with which a squeeze could be taken, but I at once sketched in my pocket-book what could be seen.

The first stone is in a sort of recess close to the south-west corner. On it I could see three letters—

E K N

On the westernmost of the two projecting stones it was easy to distinguish the following characters—

Δ □ Λ Ν Α  
Δ Η Γ

On the next stone, immediately to the east, but at a lower level, were the characters—

Χ Α Ν Ε

I pointed out these vestiges of ancient writing to my companion, who saw them very plainly. We again visited the spot on our return journey, but as at that time the stones were in the shade we could not distinguish the inscriptions so easily. When I next go there, which will probably be soon, I hope to take paper and attempt a squeeze. The letters are large, but the stones weather-worn.

J. E. HANAUER.

## RECENT DISCOVERIES, NOTES, AND NEWS FROM GALILEE.

*Haifa*.—Last month some natives working at the new road from Haifa to Nazareth discovered, at a distance of 2,300 metres from the ('Akka) city gate, a cave lying to the south of the road, in a rocky field. They came upon it whilst chasing a hare, which suddenly disappeared in a bush which was found to conceal the small opening of the cave. After having cleared away the earth about the entrance and a heavy stone which still partly closed the doorway, they found a chamber excavated in the soft Nâri rock, 5 feet 6 inches long in its direction from north to south, 7 feet 3 inches across its southern end, and only 5 feet 2 inches across its northern wall, in which is the door.

In the southern wall I found two kokim, each 5 feet 6 inches long, 2 feet wide, and 2 feet 6 inches high; in the eastern wall one koka of about the same size, and in the western wall also one koka, 6 feet long, 2 feet wide, and 3 feet high. The height of the room must have been 6 feet originally. There is a slanting vestibule, and the doorway is 2 feet high, 1 foot 6 inches wide on the top, and 2 feet 3 inches at the bottom; the stone which closed it was rectangular with rounded corners. When I visited the cave native curiosity had already rooted up the interior in hope of finding antiquities, and had carried away four sarcophagi which were found in the kokim, but I soon succeeded in finding three of them. They are made of pottery ware, very like that found at 'Abellin, and described by the late Mr. Laurence Oliphant, *Quarterly Statement*, April, 1886, p. 80. Each one has an interior length of 5 feet 4 inches, a width of 1 foot 2 inches, and a depth of  $6\frac{3}{4}$  inches; the projecting upper rims were  $2\frac{1}{2}$  inches wide, and about 2 inches thick. The lids were all broken into fragments; they were fitted into the coffin by small grooves, and had a simple line ornamentation on their upper surface. The cement of which the coffins were formed is of a very good compact quality, a mass composed of sand and "humra," or pounded pieces of jars and other earthenware, and lime; no influence of weather or time was discoverable, although the sides and bottom of the mass are but three-quarters of an inch thick. The fourth sarcophagus had, as before said, disappeared, but I happened to find its lid, broken into three parts; it measures only 3 feet 3 inches in length, 6 inches in width at one end, and  $6\frac{3}{4}$  inches on the other, with a curved handle on the top, and ornamented with waving lines running parallel to the length of the lid. This coffin evidently was that of a child. Besides these coffins, a gutter of pottery ware, 1 foot 5 inches long and  $2\frac{1}{2}$  inches wide, was also found, for what purpose intended I could not make out; also a quantity of fragments of lachrymatories.

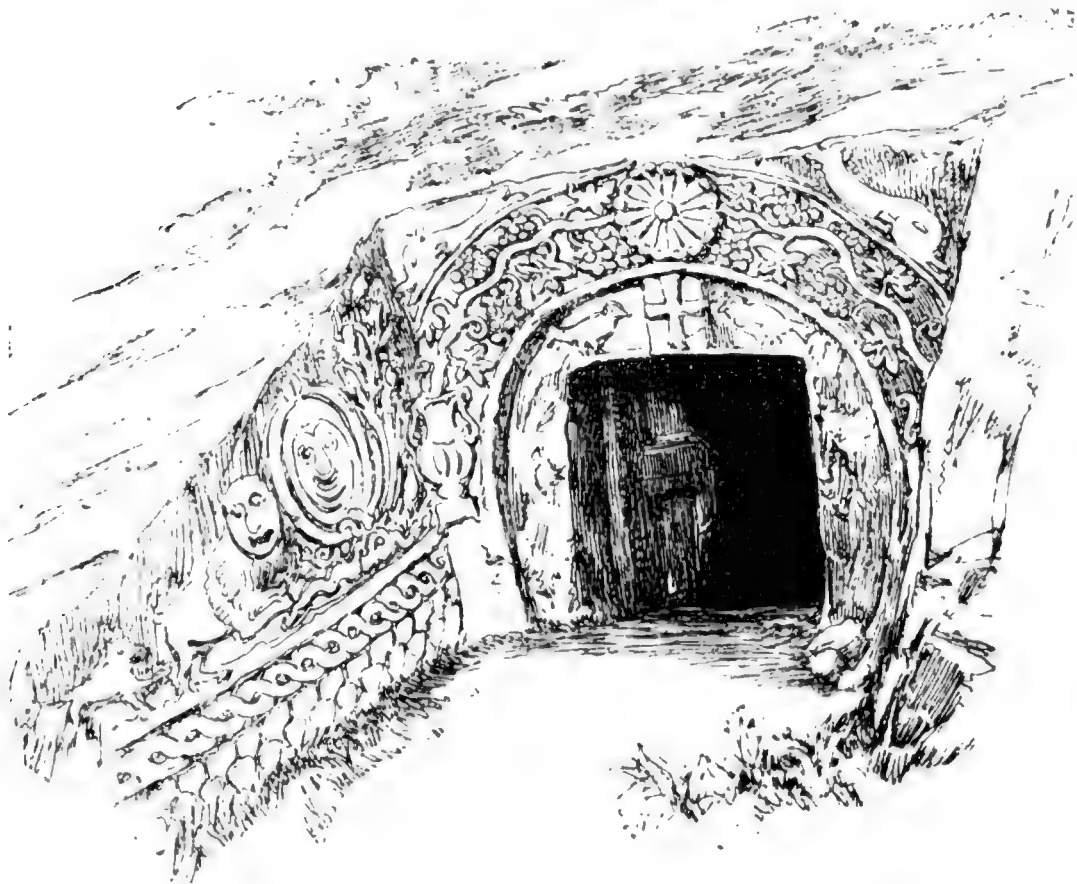
Whether any other antiquities worth mentioning were discovered besides those enumerated, the future may show; for the present the



discoverers are put under lock and key by the authorities. The vicinity of this cave seems to me to be an ancient forgotten site, probably the burial-place of *Palmaræa*, for all the rocky cliffs along the slope of Mount Carmel show indubitable signs of artificial caves with oval doors, cisterns and oil presses, quarries, circular holes in the flat rocks, &c. ; the terraces of this piece of ground, planted with olives, and called El Khalleh الخلة are bordered by old, strong walls. One of the cisterns shows an upper basin, 10 feet square, connected with a lower one, 7 feet square, by a canal ; close beside it the rock shows three steps, and on the flat top a circular hole, 1 foot 5 inches in diameter, and a little over a foot deep, with small channels cut beside it into the rock of the form of the Roman letters, M and K. The zeal of the natives in cultivating this portion of land, in hope of the coming railway to Damascus, may soon bring new discoveries to our knowledge.

*Shefa 'Amr.*—In a former report I mentioned the discovery of some caves near Shefa 'Amr. I have since come across them again, and although they had been turned into cisterns and were full of rain-water, and therefore could not be planned, I give a sketch of the curious rich ornamentation above the entrance and on both side walls of the rock-cut

TOMB AT SHEFA 'AMR.




FROM A PHOTO BY WM SIMPSON, AUG 1899

vestibule. A part of this ornamentation is weather-worn. The cross

above the door lintel proves their Christian origin; also the A and Ω aside of it. The doorway, facing north, is 2 feet 4 inches high and 1 foot 9 inches wide, and closed by a stone gate, still working; a frame around it contains vine leaves and berries, growing out of a pot, and birds. The vestibule in front of the door is cut out in a slanting form from the rock; each of the corners formed between arch and sides are filled out with a fish ornament. The side walls have allegorical figures, a curious human face (probably the sun), to the side of it a lion, followed by a smaller animal, probably a jackal; birds fill up the small empty spaces; next to the pot above mentioned we find a tree with two fruits like pomegranates; a wreath ornament is placed below the human face. These ornamentations are framed by a double cornice at the bottom of the cut, which seems to represent in a primitive manner the egg and arrow-head ornament of the Greeks. Several steps lead from the surface down to the bottom of this rock-cut vestibule, which has a length of 4 feet 10 inches, a height of 3 feet 5 inches at the door, and of 1½ feet near the steps, and a general width of 3 feet 7 inches. As in the other tombs near by, the slant of the face of the rock was used to form the vestibule. In the "Memoirs" of the Palestine Exploration Fund (vol. i, pp. 340, 343) similar caves and ornamentations near Shefa 'Amr are mentioned, and attributed to the Byzantine period.

'Ain es Sufsâfeh.—The heavy rainfalls of last winter washed away the earth around 'Ain es Sufsâfeh, a spring near Nazareth, in the Wâdy M'alûl, and brought to light a broken sarcophagus, built into the wall of the well, at a depth of 3 feet below the former surface of the surrounding ground, where it had doubtless been used before as a trough to water the flocks. The sarcophagus, as far as it can be seen, has a width of 2 feet 3 inches on the outside, and a height of 2 feet 5 inches, it is made of a hard limestone, has simple ornaments on the top and bottom, and a weather-worn wreath ornament on one of the exposed sides.

*Mughâret rabû' Jessâs* مغارة رباع جساس. This was the name given to a cave supposed to be in the neighbourhood of the Kubr ez Zîr, an ancient tomb about 500 yards north-east of el Harbaj (see sheet V of large map) in the Kishon plain. The Zîr زير was, according to local Arab traditions, the head of the mighty Bedawîn tribe called Beni Halâl بنى حلال who lived at or about the time of the Prophet Mohammed, in the country between Nazareth and Haifa; and here and there in Galilee we come across a spot to which his name is attributed, as Kusr ez Zîr, at M'alûl, near Nazareth (Memoirs, vol. i, p. 322); Tell ez Zîr, a mud mound close to the palm groves east of Haifa, &c. The tradition relates that Zîr had a brother named Kleib, كليب and a cousin named Jessâs, جساس who was the head of the tribe of the Beni Murra, بنى مرة and made war upon his cousins, by whom he and his tribe

were entirely destroyed, and that the bodies were buried at the cave mentioned, near the village of Harbaj, which still bears the name of Mughâret rabâ' Jessâs, "the cave of the comrades of Jessâs." Near el Harbaj an ordinary Bedawîn grave, 10 feet long and 3 feet across, surrounded by rude, large stones, is shown as that of ez Zîr himself, and the Bedawîn have used the venerated spot as a general burial place. About 150 yards north of it two beautiful terebinth (*butm*) trees mark the spot which by others is considered to be the real grave of ez Zîr. Below these trees we see a singular rock, in which steps seem to have been hewn, with a flat top about 2 feet square; time and weather have split the soft limestone rock into two pieces. Immediately adjoining it a number of perennial springs rise and form the head of the small Wâdy Harbaj, which joins the Kishon; coloured rags mark the terebinths as holy *fakîrî* trees, which point to a period of Arab pagan history, for I do not hesitate to believe that the singular rock, with traces of channels, and holes and steps, once served as an altar for pagan worship. Some 600 yards due east of the Kubr ez Zîr, at the foot of a rocky slope, near where Sheet V of the large Map marks a small ruin called Abtûn, the renowned cave of Jessâs, the site of which had been nearly forgotten by the neighbouring Bedawîn and Fellahîn, was discovered again during last winter. A Bedawy led me to the spot, which I found closed up again by large, unhewn stones; after having moved them away, I crawled on hands and body into the cave, but had to break my way first through heaps of human skulls, with which the cave was partly filled; a quantity of other bones of the human skeleton were lying about in disorder, but it seemed to me not corresponding in number to the 60 skulls which I counted lying in my immediate neighbourhood. The skulls are still in a good state of preservation, only the jaws were mostly fallen off, and the teeth gone. The interior of the cave seems natural; no signs of an ancient tomb, but it may have been widened out of the soft and crumbling rock; it is entirely dry, which fact accounts for the preservation of the human remains for so long a time. Returning towards el Harbaj, the Bedawy guide took me most secretly by the hand, led me round the hill and then a little way up the slope, and just in front of the village, showed me a recently opened second cave, which I entered, and found a large number of human skulls, in about the same condition as those of the cave above described. Near its natural entrance, formerly closed by a single rough slab, I found the skeleton of a Bedawy woman, still partly clothed with the characteristic blue linen wound around her head, like that of a mummy. This skeleton is evidently of a later date. This cave also seems natural. My guide attributed to both of the caves the name of Jessâs. On my second visit I found them closed up again by the Bedawîn. On a stone of the Bedawîn cemetery near the Kubr ez Zîr, I remarked the following ancient *Wasm*, or tribe-sign , but I could not find out by which tribe it is, or was, used. By this discovery, Arab tradition with regard to the "brave and giant Zîr" is again awakened among the native population of

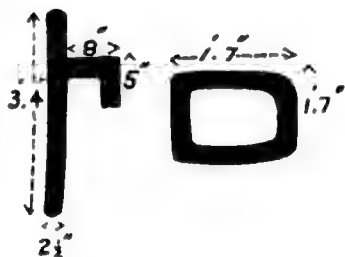
the district, and story-tellers take advantage of the long nights of Ramazan to repeat to breathless listeners the stories connected with the great Bedawy warrior.

*'Akka*.—A Maronite gentleman of 'Akka brought me lately a fine antique head carved out of the marble-like white limestone of *Jûlis*, near 'Akka. The head, which measures 7 inches in height, has a Greek profile; the chin is partly broken; around the forehead a string of jewels is wound, and held together by a rectangular ornament representing a precious stone, with tassels hanging down to the eyebrows. This jewelry resembles the ornaments now worn by young Arab brides at their wedding. The workmanship of this head, though not peculiarly fine, is nevertheless good. It is said to have been found among the *débris* very near the city gate of 'Akka. The same man showed me three other antiques: a small marble head, with a negro profile and curled hair, partly spoiled, 4 inches high; a little horse, 4 inches long, made of copper, with holes on the sides evidently to fasten the figure of the rider, which is lost; and a small idol, 3 inches long, representing a Salamander on one side, and (probably) a young frog on the other, apparently of Phœnician origin. The stone of which this is worked is very hard, black, and has a shining surface, even a sharp knife makes no scratch on it. These also were found in and near 'Akka.

*Tantûra*.—Very near the rock-cut passage which connects the shore of Tantûra with the inland plain, due east from the old tower of Tantûra, at a rocky spot in which numerous caves are cut (see "Memoirs," II, Sheet VII, p. 11), I discovered an apse cut into the rock. The apse is 1 foot 2 inches, more than semi-circular; the semi-diameter of the interior is 10 feet 3 inches; two steps lead up from the present floor to the surface of the rock, each measuring 1 foot 7 inches in width and 1 foot 3 inches in height, so that the radius of the outer circle is 13 feet 5 inches.

At each end and in the middle of the interior semi-circle I found a square hole,  $11\frac{1}{2}$  inches broad,  $9\frac{1}{2}$  inches wide, and 6 inches deep, evidently intended for pillars to be built in. The bearing of the main axis is E.  $18^\circ$  S. To the west is a quarry with stones not quite broken out of the rock, and I therefore believe that the work is an unfinished Basilica.

*Dustrey*.—Near *'Athlîl*, on the eastern cliffs of Khurbet Dustrey, a little north of the rock-cut passage, on a nearly inaccessible cliff, I found the following marks engraved in the rock, which I do not find mentioned in the "Memoirs." Is this a gigantic "wasm" of an old Bedawîn tribe, or is it



a mason's mark? The engraving is 2 or 3 inches deep and about  $2\frac{1}{2}$  inches

wide, and the length of the principal character is 3 feet 4 inches. These marks very easily escape detection owing to their height from the ground.

*Umm el 'Alak* near *Bureikeh* (Sheet VIII.).—Here the following Greek inscription on a small marble slab was shown to me, it had been dug out of an old Bedawin (?) cemetery near :



G. SCHUMACHER.

## METEOROLOGICAL OBSERVATIONS.

SARONA, 1885.

THE numbers in column 1 of this table show the highest reading of the barometer in each month ; the maximum for the year was 30·162 ins., in December. In the years 1880, 1881, and 1884 the maximum was in January, in 1882 in February, and in 1883 in December, as in this year ; the mean of the five preceding highest pressures was 30·224 ins.

In column 2, the lowest reading in each month is shown ; the minimum for the year was 29·482 ins., in April. In the years 1880 and 1884 the minimum was in April, as in this year, in 1881 in February, in 1882 in July, and in 1883 in January ; the mean of the five preceding lowest pressures was 29·518 ins.

The range of barometric readings in the year was 0·680 inch ; the mean of the five preceding years being 0·706 inch.

The numbers in the 3rd column show the range of readings in each month ; the smallest was 0·192 inch, in October, and the largest, 0·710 inch, in September.

The numbers in the 4th column show the mean monthly pressure of the atmosphere ; the greatest, 29·950 ins., was in December. In the years 1880, 1881, 1882, and 1884, the greatest was in January, and in 1883 in February ; the smallest, 29·657 ins., was in August. In the years 1880, 1882, and 1883, the smallest was in July, in 1881 and 1884, in August, as in this year.

The highest temperature of the air in each month is shown in column 5 ; the highest in the year was 103°, in May. In the five preceding years, viz., 1880, 1881, 1882, 1883, and 1884, the highest temperatures were 103°, 106°, 93°, 106°, and 100° respectively. The next in order was 98° in October, and 94° in September. The first day in the

EDIATELY NORT  
EL. LATITUDE 3

apour, 9 a.m.

| Weight in a<br>Cubic Foot<br>of Air. | Additional<br>Weight<br>required for<br>Saturation. |
|--------------------------------------|---|
| grs.<br>4.0                          | grs.<br>1.3   |
| 4.0                                  | 1.3   |
| 4.5                                  | 2.2   |
| 4.9                                  | 2.7   |
| 6.3                                  | 3.7   |
| 6.8                                  | 3.9   |
| 7.2                                  | 4.6   |
| 7.6                                  | 4.7   |
| 7.1                                  | 4.8   |
| 5.4                                  | 5.4   |
| 4.6                                  | 3.6   |
| 4.3                                  | 1.9   |
| 5.6                                  | 3.3   |

MONTHLY METEOROLOGICAL TABLE DEDUCED FROM OBSERVATIONS TAKEN AT SARONA BY HERR J. DREHER IMMEDIATELY NORTH OF THE GREAT ORANGE GROVES OF JAFFA, SYRIA, 1½ MILE FROM THE SEA SHORE, ON SANDY SOIL, AND ABOUT 50 FEET ABOVE SEA-LEVEL. LATITUDE 32° 4' N., LONGITUDE 34° 47' E.

By JAMES GLAISHER, F.R.S.

| Months, 1885.      | Pressure of Atmosphere in Month.<br>Corrected to 32° Fahrenheit. |               |              |               | Temperature of the Air in Month. |         |        |                      |                     |                   |       | Mean Reading at 9 a.m. |           |            | Vapour, 9 a.m.           |                                |  | Degree of Humidity. | Weight of a Cubic Foot of Air. | Wind.                  |            |           |            |            |            |            |            |                       | Mean Amount of Cloud. | Rain.                            |                   |
|--------------------|--|---------------|--------------|---------------|----------------------------------|---------|--------|----------------------|---------------------|-------------------|-------|------------------------|-----------|------------|--------------------------|--------------------------------|--|---------------------|--------------------------------|------------------------|------------|-----------|------------|------------|------------|------------|------------|-----------------------|-----------------------|----------------------------------|-------------------|
|                    | Highest.   | Lowest.       | Range.       | Mean.         | Highest.                         | Lowest. | Range. | Mean of all Highest. | Mean of all Lowest. | Mean daily Range. | Mean. | Dry Bulb.              | Wet Bulb. | Dew Point. | Elastic Force of Vapour. | Weight in a Cubic Foot of Air. | Additional Weight required for Saturation. |                     |                                | Relative Proportion of |            |           |            |            |            |            |            | Calm, or nearly Calm. |                       | Number of Days on which it fell. | Amount Collected. |
|                    |  |               |              |               |                                  |         |        |                      |                     |                   |       |                        |           |            |                          |                                |  |                     |                                | N.                     | N.E.       | E.        | S.E.       | S.         | S.W.       | W.         | N.W.       |                       |                       |                                  |                   |
|                    |  |               |              |               |                                  |         |        |                      |                     |                   |       |                        |           |            |                          |                                |  |                     |                                |                        |            |           |            |            |            |            |            |                       |                       |                                  |                   |
| January .. .. .    | in.<br>30·151  | in.<br>29·616 | in.<br>0·535 | in.<br>29·919 | 70°·0                            | 40°·0   | 30°·0  | 62°·3                | 46°·6               | 15°·7             | 54°·4 | 56°·4                  | 52°·6     | 49°·1      | grs.<br>·350             | grs.<br>4·0                    | grs.<br>1·3                                | 76                  | 536                            | 6                      | 7          | 1         | 0          | 1          | 3          | 0          | 4          | 9                     | 6·3                   | 17                               | ins.<br>7·89      |
| February .. .. .   | 30·097   | 29·716        | 0·381        | 29·929        | 73·0                             | 42·0    | 31·0   | 65·3                 | 45·6                | 19·7              | 55·5  | 57·6                   | 53·6      | 49·9       | ·361                     | 4·0                            | 1·3  | 76                  | 535                            | 3                      | 1          | 0         | 1          | 4          | 2          | 0          | 1          | 16                    | 4·3                   | 9                                | 1·46              |
| March .. .. .      | 30·109   | 29·500        | 0·609        | 29·861        | 90·0                             | 38·0    | 52·0   | 70·1                 | 48·9                | 21·2              | 59·5  | 64·6                   | 58·2      | 53·1       | ·402                     | 4·5                            | 2·2  | 66                  | 526                            | 0                      | 0          | 0         | 1          | 2          | 4          | 5          | 3          | 16                    | 4·7                   | 8                                | 1·19              |
| April .. .. .      | 29·995   | 29·482        | 0·513        | 29·706        | 90·0                             | 45·0    | 45·0   | 73·2                 | 53·2                | 20·0              | 63·2  | 68·2                   | 61·2      | 55·8       | ·447                     | 4·9                            | 2·7  | 64                  | 520                            | 0                      | 0          | 0         | 0          | 1          | 5          | 9          | 0          | 15                    | 5·4                   | 5                                | 0·61              |
| May.. .. .         | 29·905   | 29·687        | 0·218        | 29·813        | 103·0                            | 53·0    | 50·0   | 83·4                 | 60·0                | 23·4              | 71·7  | 76·3                   | 68·7      | 63·3       | ·583                     | 6·3                            | 3·7  | 65                  | 513                            | 1                      | 0          | 0         | 1          | 0          | 4          | 12         | 3          | 10                    | 2·6                   | 1                                | 0·12              |
| June .. .. .       | 29·886   | 29·630        | 0·256        | 29·776        | 93·0                             | 58·0    | 35·0   | 82·8                 | 64·8                | 18·0              | 73·8  | 79·4                   | 71·2      | 65·6       | ·630                     | 6·8                            | 3·9  | 63                  | 509                            | 0                      | 0          | 1         | 1          | 1          | 9          | 12         | 3          | 4                     | 2·8                   | 2                                | 0·56              |
| July.. .. .        | 29·793   | 29·509        | 0·284        | 29·679        | 88·0                             | 66·0    | 22·0   | 85·7                 | 68·8                | 16·9              | 77·3  | 82·5                   | 73·5      | 67·5       | ·674                     | 7·2                            | 4·6  | 60                  | 504                            | 0                      | 0          | 0         | 0          | 0          | 14         | 14         | 1          | 1                     | 2·5                   | 0                                | 0·00              |
| August .. .. .     | 29·825   | 29·535        | 0·290        | 29·657        | 91·0                             | 65·0    | 26·0   | 87·1                 | 68·3                | 18·8              | 77·7  | 83·8                   | 75·1      | 69·4       | ·717                     | 7·6                            | 4·7  | 62                  | 502                            | 0                      | 0          | 0         | 0          | 3          | 14         | 8          | 3          | 4                     | 1·4                   | 0                                | 0·00              |
| September .. .. .  | 30·373   | 29·663        | 0·710        | 29·798        | 94·0                             | 64·0    | 30·0   | 87·1                 | 67·1                | 20·0              | 77·1  | 82·3                   | 73·1      | 67·0       | ·661                     | 7·1                            | 4·8  | 60                  | 507                            | 1                      | 0          | 0         | 0          | 0          | 8          | 6          | 2          | 12                    | 1·6                   | 0                                | 0·00              |
| October .. .. .    | 29·970   | 29·778        | 0·192        | 29·904        | 98·0                             | 51·0    | 47·0   | 85·6                 | 63·3                | 22·3              | 74·4  | 79·5                   | 67·6      | 59·4       | ·505                     | 5·4                            | 5·4  | 50                  | 512                            | 0                      | 1          | 2         | 1          | 4          | 0          | 2          | 1          | 20                    | 3·1                   | 1                                | 0·79              |
| November .. .. .   | 30·088   | 29·822        | 0·266        | 29·921        | 84·0                             | 48·0    | 36·0   | 76·5                 | 53·9                | 22·6              | 65·2  | 70·7                   | 61·2      | 54·1       | ·417                     | 4·6                            | 3·6  | 56                  | 521                            | 0                      | 0          | 0         | 1          | 8          | 1          | 0          | 0          | 20                    | 2·6                   | 4                                | 0·15              |
| December .. .. .   | 30·162   | 29·780        | 0·382        | 29·950        | 80·0                             | 43·0    | 37·0   | 70·1                 | 51·9                | 18·2              | 61·0  | 61·9                   | 56·6      | 52·1       | ·389                     | 4·3                            | 1·9  | 74                  | 531                            | 0                      | 1          | 3         | 10         | 11         | 0          | 1          | 1          | 4                     | 4·7                   | 16                               | 7·29              |
| Means .. .. .      | 30·030   | 29·643        | 0·386        | 29·826        | 87·8                             | 51·1    | 36·7   | 77·4                 | 57·7                | 19·7              | 65·9  | 71·9                   | 64·4      | 58·9       | ·511                     | 5·6                            | 3·3  | 64                  | 518                            | Sum.<br>11             | Sum.<br>10 | Sum.<br>7 | Sum.<br>16 | Sum.<br>35 | Sum.<br>64 | Sum.<br>69 | Sum.<br>22 | Sum.<br>131           | 3·5                   | Sum.<br>63                       | Sum.<br>20·06     |
| Number of Column . | 1  | 2             | 3            | 4             | 5                                | 6       | 7      | 8                    | 9                   | 10                | 11    | 12                     | 13        | 14         | 15                       | 16                             | 17   | 18                  | 19                             | 20                     | 21         | 22        | 23         | 24         | 25         | 26         | 27         | 28                    | 29                    | 30                               | 31                |





year the temperature reached  $90^{\circ}$  was on March 16, in April it reached  $90^{\circ}$  on one day ; in May it reached or exceeded  $90^{\circ}$  on six days ; the highest in the year,  $103^{\circ}$ , took place on the 23rd of May, and on the 10th of this month the temperature reached  $102^{\circ}$  ; in June it reached  $90^{\circ}$  on two days ; in August on three days ; in September on four days ; and in October on seven days ; therefore the temperature reached or exceeded  $90^{\circ}$  on 24 days ; in the year 1880 on 36 days ; in 1881 on 27 days ; in 1882 on 8 days, in 1883 on 16 days, and in 1884 on 14 days.

The numbers in column 6 show the lowest temperature in each month. The lowest in the year was  $38^{\circ}$  on the 19th of March ; the next in order was  $39^{\circ}$  on both the 11th and 20th of March, and in no other month throughout the year was the temperature below  $40^{\circ}$ , therefore the temperature was below  $40^{\circ}$  on 3 nights in the year ; in 1880 it was below  $40^{\circ}$  on 13 nights ; in 1881 on 2 nights ; in 1882 on 13 nights ; in 1883 on 2 nights, and in 1884 on 9 nights during the year.

The yearly range of temperature was  $65^{\circ}$  ; in the five preceding years, viz., 1880, 1881, 1882, 1883, and 1884, the yearly ranges were  $71^{\circ}$ ,  $67^{\circ}$ ,  $59^{\circ}$ ,  $71^{\circ}$ , and  $68^{\circ}$  respectively.

The range of temperature in each month is shown in column 7, and these numbers vary from  $22^{\circ}$  in July to  $52^{\circ}$  in March.

The mean of all the highest temperatures by day, of the lowest by night, and of the average daily ranges of temperature are shown in columns 8, 9, and 10 respectively. Of the high day temperature the lowest,  $62^{\circ}3$ , is in January, and the highest,  $87^{\circ}1$ , in both August and September ; of the low night temperature the coldest,  $45^{\circ}6$ , is in February, and the warmest,  $68^{\circ}8$ , in July ; the average daily range of temperature, as shown in column 10, the smallest,  $15^{\circ}7$ , is in January, and the greatest,  $23^{\circ}4$  in May.

In column 11 the mean temperature of each month is shown, as found from observations of the maximum and minimum thermometers only. The month of the lowest temperature was January,  $54^{\circ}4$ , and that of the highest was August,  $77^{\circ}7$ . The mean temperature for the year was  $65^{\circ}9$ , and of the five preceding years, viz., 1880, 1881, 1882, 1883, and 1884 were  $66^{\circ}4$ ,  $66^{\circ}7$ ,  $65^{\circ}5$ ,  $65^{\circ}7$  and  $65^{\circ}7$  respectively.

The numbers in columns 12 and 13 are the monthly means of a dry and wet bulb thermometer taken daily at 9 a.m. In column 14 the monthly temperature of the dew point, or that temperature at which dew would have been deposited at the same hour is shown ; the elastic force of vapour is shown in column 15. In column 16 the water present in a cubic foot of air is shown ; in January it was as small as 4 grains, and in August as large as  $7\frac{1}{2}$  grains. In column 17 the additional weight required for saturation is shown. The numbers in column 18 show the degree of humidity, saturation being considered 100 ; the smallest number indicating the driest month, is 50 in October, and the largest, 76, both in January and February ; the weight of a cubic foot of air in grains under its pressure, temperature, and humidity at 9 a.m., is shown in column 19.

The most prevalent winds in January were N. and N.E., and the least prevalent were S.E. and W. In February the most prevalent were N. and S., and the least were E. and W. In March and April the most prevalent were W. and S.W., and the least were N.E. and E. In May the most prevalent was W., and the least were N.E., E., and S. In June the most prevalent were W. and S.W., and the least were N. and N.E. In July and August the most prevalent were W. and S.W., and the least were N, E., and compounds of E. In September the most prevalent were W. and S.W., and the least were E. and its compounds. In October the most prevalent was S., and the least were N. and S.W. In November the most prevalent was S., and the least were N. and compounds of N, and in December the most prevalent winds were S. and S.E., and the least were N. and S.W. The most prevalent wind for the year was W., which occurred on 69 times during the year, of which 14 were in July, and 12 both in May and June; and the least prevalent wind was E., which occurred on only 7 times during the year, of which three were in December, two in October, and one in both January and June.

The numbers in column 29 show the mean amount of cloud at 9 a.m.; the month with the smallest is August, and the largest January. Of the cumulus, or fine weather cloud, there were 113 instances in the year; of these there were 16 in April, 13 in June, 12 in both September and December, and only 4 in November. Of the nimbus, or rain cloud, there were 26 instances in the year, of which 10 were in January, 6 in December, and 5 in March, and only 3 from April to November. Of the cirrus there were 51 instances. Of the stratus 24 instances. Of the cirro-cumulus 39 instances. Of the cirro-stratus, 9 instances; and 103 instances of cloudless skies, of which 14 were in November and 13 in August.

The largest fall of rain for the month in the year was 7.89 ins. in January, of which 2.15 ins. fell on the 10th, 1.30 inch on the 31st, and 1.10 inch on the 11th. The next largest fall for the month was in December, 7.29 ins., of which 2.14 ins. fell on the 24th, and 1.68 inch on the 25th. No rain fell from April 11th till the 15th of May, when 0.12 inch fell; then none fell from the 15th of May till the 10th of June, when 0.38 inch fell, next day, the 11th, when 0.18 inch fell; and then there was no rain from this day till the 5th of October, a period of 115 consecutive days without rain. In 1880 there were 168 consecutive days without rain; in 1881, 189 consecutive days without rain; in 1882 there were two periods of 76 and 70 consecutive days without rain; in 1883, 167 consecutive days without rain; and in 1884, 118 days without rain. The fall of rain for the year was 20.06 ins., being 8.62 ins., 2.03 ins., and 10.00 ins. less than in 1880, 1882, and 1883 respectively, and 2.57 ins. and 1.33 ins. more than in 1881 and 1884 respectively. The number of days on which rain fell was 63. In 1880 rain fell on 66 days, in 1881 on 48 days, in 1882 on 62 days, in 1883 on 71 days, and in 1884 on 65 days.

JAMES GLAISHER.

## NORMAN PALESTINE.

In the last chapter of "Syrian Stone Lore" I have given a general view of the state of Palestine between the years 1099, A.D., and 1291, A.D., during which time the country, in part or altogether, was ruled by the Franks. As regards the geography of Syria, there is no period concerning which we know as much as we do of the mediæval topography of the Frankish kingdom. Even in the later period of the Moslem rule, the accounts of the country are mere sketches compared with the full details obtainable from contemporary documents (the Cartularies, the Chronicles, and the Pilgrim Guides), which have been collected by various scholars, among whom De Vogüé, Rey, and Tobler, are the most distinguished.

In collecting, in index form, the names of places mentioned in the above-noted works, I find that they number between 600 and 700 in all within the limits of the Survey of Western Palestine, which represents the original Kingdom of Jerusalem before the conquests in Moab and Gilead, and in the land of Suhete (N.E. of the Sea of Galilee), and in the land of Shouf (near Sidon), which formed the important fief of the Barony of Sagette. This topography has been carefully collected and arranged by Rey ("Colonies Franques," Paris, 1883), and only a very few place names can be added to his lists. He has also successfully identified a very large proportion of the sites, but as he apparently was not in possession of the Survey map, and as the Survey Memoirs were unpublished at the time, a considerable amount of additional identification becomes possible, and only a very small proportion of these sites are left without location on the map. In some cases I venture to differ from M. Rey, but the value of his work as a whole needs no acknowledgment.

In addition to this work, the sources of information which I have found most valuable include the "Cartulary of the Church of the Holy Sepulchre," the history of King Richard's campaign, by Geoffrey de Vinsauf, the topographical works of John of Wirzburg and of Theodoricius, and the Chronicles in Bongar's "Gesta Dei," which includes Marino Sanuto's account of Palestine. To these may also be added the "Citez de Jherusalem," which I have recently had occasion to study again. The "Cartulary of the Holy Sepulchre Cathedral," contains the names of about sixty villages in Palestine, and the description of property is, in some cases, so detailed as to need a large-scale map, like that of the Palestine Exploration Fund, for its illustration.

The recovery of 600 place names in Western Palestine represents a name for every third mile in distance. We thus possess what amounts almost to a Domesday book of the country, dating nearly as early as our famous English work. It is very interesting to note, that in this nomenclature, taken as a whole, the native language is adopted by the conquerors, though they sometimes gave a second Frankish name to a place, and gave Norman names to their castles. The attempts to reproduce the

Arabic names are on the whole creditable, though without any systematic orthography, and the documents, as a whole, have suffered comparatively little from copyists' errors. We must not forget that distinguished Franks were able both to speak and to write Arabic ; and the mediæval topography forms a substantial link between the old Hebrew and the modern Arab nomenclature, and shows us not only that the country is practically unchanged since the 12th century, but that a severe test may be so placed on the character of the Survey work, to which test it answers in a very satisfactory manner.

From the identification of the towns it becomes possible also to trace the borders of the various sub-divisions of the kingdom, including the County of Jaffa and Ascalon, the Seigneuries of Arsur, Cæsarea, Caiffa Nâblus, and Caïmont, the possessions of the cathedral of the Abbey of St. Sion, and of the Abbey of Mount Tabor.

After the loss of Jerusalem we find the feudal lords selling their lands to the Templars, the Hospitallers, and the Teutonic knights, but much earlier we find the Church to be growing richer from year to year with lands bequeathed by those who had won them with the sword.

After 1187 we gather little or nothing of the topography of the Judean and Samaritan hills which fell to Saladin with the lands east of Jordan, but in 1191 we have accounts of the topography of Sharon and the Philistine plain, and down to the end of the 13th century the Teutonic knights and the Venetians held nearly the whole of Galilee and the sea coast from Acre to Sidon, and further north.

The Teutonic Order bought out the rights of the earlier nobles and were left undisturbed by agreement made in 1240 A.D. with an upstart Sultan of Damascus.

The common term for a village in the Norman documents is *casale* (or in Latin *casella*) which William of Tyre explains to mean a place of 100 houses or more, paying a tax of one bysant each. This word is, as a rule, however, only applied to places with a Norman name.

As a little problem in exact topography we may take the explanation which is so clearly to be obtained from Sheet VIII of the Survey Map, of the Deed numbered 155 in the Cartulary of the Holy Sepulchre Cathedral (E. de Rosiere's Edition, Paris, 1849). In this Hugh, Lord of Cæsarea Palestina, gives to the Canons :—

"The mountain contiguous to the Garden of Fiesse (otherwise Defiesse), where the fountain springs form a conduit, beginning (on the other side) from the road which comes from Braicet to the casale of the Holy Sepulchre, and goes east by the cave between two mountains by the torrent, and comes to the little mountain between the said mountain and the Mountain of Broiquet (and other mountains), and by the old limekiln in a straight line to the thorn in the plain dividing the casale of the Holy Sepulchre (Fiesse) from the land of Sabarim of the Hospital." He also gives the Casale Bubalorum.

This property can be traced exactly on the Survey Map. The site of

Defiesse is the ruin *Dufeis*, in the corner of the Sharon plain, under Carmel. The garden is shown on the map north of the ruin, and by it a spring ('Ain Ism'ain), from which starts the conduit or aqueduct which runs to Caesarea. The road from Braicet, which goes east, I take to be the road from the ruin *el Bureij* (about a mile to the west), this passes up a valley, as stated in the text, and there is a cave on the valley side marked on the map. The Mountain of Broiquet is clearly the hill north of this valley on which the little village, *el Bureikch*, is marked, while the Sabarim of the Hospital is evidently the village of *Subbarin*, rather more than a mile to the north-east in the same valley. Thus within a radius of two miles we can identify every local name mentioned, with the spring, garden, aqueduct, cave, valley, road, and mountains noted. The Casale Bubalorum, given at the same time is, I think, the ruin *Bablân*, south of *Dufeis*.

The ruins present nothing but a few walls, according to the "Memoirs," but the nomenclature is unchanged.

The results of the Index, which I have now completed, may best be shown on a map, but the cases in which new identifications are possible, which are not mentioned by preceding writers, may be here enumerated.

*Achara*, a fief of Chateau du Roi (M'alia), in Galilee, is probably the modern village 'Akrith (Sheet III).

*Amouhde*, a casale near Ascalon, is now the ruin 'Amâdeh (Sheet XX).

*Artabec*, sold to the Hospitallers in 1135, east of Kalensone, is perhaps the ruin *Yobek*, in the required position (Sheet XI).

*Aschar*, a casale given in 1115 to St. Mary of Josaphat, apparently in the Seigneurie of Naples, is probably the village 'Askar (Sychar), near Nâblus (Sheet XI).

*Assera*, given to the Hospitallers by the Seigneur of Bessan, seems to me to be the village 'Asîreh (Sheet XI).

*Assir* or *Serra*, a casale belonging to Ramleh, seems probably to be *Yâzur*, near Jaffa (Sheet XIII).

*Mahumeria* of *Cathara*, in Ascalon, called Viridis in Latin (No. 58, Cartulary of Holy Sepulchre). This is interesting. Cathara is evidently *el Khudr*, "the green one," and in Ascalon there still remains a little mosque, so called. Mahumeria or Mahomerie was a crusading word for a mosque. The writer in this case knew Arabic, as shown by his rendering Cathara by Viridis.

*Balaton* a casale of Chateau du Roi in Galilee, probably *Belatân*, west of M'alia (Sheet III).

*Belhataouahin* probably for *Abu et Tawahîn* "father of mills," was a casale given to the Hospitallers in 1136 by Hugh of St. Abraham (Hebron), to be sought in the Hebron hills, probably *Deir et Tahûneh* (Sheet XVII), which, like many other places held by the religious orders in the 12th century, retains the name *Deir* or "monastery."

*Belmont*, as I have shown in the "Memoirs" (vol. iii, p. 18), appears to

be *Sôba* (Sheet XVII). M. Rey appears to have come to the same conclusion, though he does not mention the distance and direction noted by Brocardus, which is strongly in favour of this identification. The remains of the Crusading Castle are still visible at *Sôba*.

*Benchabeth*, a village belonging to the Holy Sepulchre Cathedral, seems to me to be a copyist's error for *Beni Hârith*.

*Bene Hatie*, mentioned with the preceding is perhaps the present *Kefr 'Atya* (Sheet XIV).

*Betheligel*, also noticed in the Cartulary of the Holy Sepulchre, is perhaps *Beit Likia* (Sheet XVII).

*Bether*, given by Baldwin II to N. Dame de Josaphat is probably *Bittir* (Sheet XVII).

*Bethsurie*, Cartulary of Holy Sepulchre, probably *Beit Surik* (Sheet XVII).

*Bet Digge*, in the same list apparently the present *Beit Dukku* (Sheet XVII).

*Beze*, a casale belonging to Bethel given by Balian d'Ibelin to the convent of St. Joseph of Arimathæa seems to be *Deir Ibzî'a* near Bethel (Sheet XIV).

*Bombrac*, or *Bombrac*, in the Jaffa plain (Itin. Ric. iv, 30), is the present *Ibn Ibrak* (Sheet XIII).

*Buflles*, or Casale Bubalorum, as before noted, seems to be the ruin *Bablân* (Sheet VIII).

*Cala*, a place between Ramleh and Mirabel, and *Chole* near Ramleh, with *Gul*, a casale of the Abbey of St. Sion, appear to be the village *Kâleh* (Sheet XIV).

*Casracos*, near Aschar, in the Seigneurie of Naples, is probably *Kefr Kâs* (Sheet XI).

*Cedo*, a casale of the Abbey of Mount Sion, near Jerusalem, is perhaps the ruin *Kuriet Saidh* (Sheet XVII), where there is a crusading inscription on a lintel stone, as given in the "Memoirs."

*Courcoza*, a casale in the Hebron district, is perhaps, the ruin *Kurza* (Sheet XXI).

*Dere*, a casale of the Church of St. Gilles (Sinjil) is perhaps *Deir es Sudân* ("Monastery of Cassocks") west of Sinjil (Sheet XIV).

*Derhassen*, a casale of the Holy Sepulchre Cathedral, is the ruin *Deir Hasan* (Sheet XVII).

*Der Sabeb*, in the same category, is the ruin *Deir esh Shabîb* ("Monastery of Youths" Sheet XVII).

*Derxerip*, in the same Cartulary, is perhaps the present *Dier Tureif* (Sheet XIV); it is mentioned with the preceding.

*Engara*, a casale of the Venetians in the region near Acre, probably the ruin *'Ain Haur* (Sheet III).

*Farachiem* or *el Farachie*, a casale of the Pisans in 1189, possibly *Ferâsin* (Sheet VIII).

*Feituta* or *Beituta*, a casale given to the Hospitallers by Hugh of St. Abraham (Hebron), is the present ruin *Fattâtah* (Sheet XX).



*Galafice*, from its position seems to be the village *Ikhneîfis* (Sheet V).

*Galilee*, a large fief in the maritime plain, appears to me to be clearly the modern *el Jell*, the Chateau des Plaines east of it being the present ruined castle at Kalensaweh.

*Gemail*, the tithes of which belonged to St. Mary of Josaphat. Perhaps *Umm el Jemâl* near Abu Dis (Sheet XVII).

*Geschale*, apparently in the Philistine plain, appears to be the ruin *Kashkalîgeh*, south of Beit Jibrin, which town belonged to the Knights Hospitallers as did four ploughs of land at Geschale (Sheet XX).

*Gez*, a casale of Chateau du Roi, obtained by the Teutonic Knights in 1289, appears to be *Jett*, south of M'alia (Sheet III).

*Heulem*, a casale paying tithes to the Abbey of Mount Tabor, clearly the village 'Aulam (Sheet IX).

*Heedix*, a casale of Mount Tabor. Perhaps *el Haditheh*, the *x* here, as in a previous case, being a mistake for *t*.

*Hubim*, a casale of the Holy Sepulchre Cathedral, probably *Hubîn*, a ruin with a good spring of the same name (Sheet XVII).

*Huxemia*, in Lower Galilee, mentioned in the same Cartulary, seems from its position (see Nos. 124 and 149 of the Cartulary) to be *Iksal* (Sheet VI), "the cave near Casale Huxemia," might be the curious hermit cave called el Mat-hûneh above Iksal.

*Josaphat* was a place north of Jerusalem, mentioned by Fetellus and by Marino Sanuto, apparently *Sh'afât* (Sheet XVII).

*Jerraz*, in or near the Jordan valley, and given in 1115 to St. Mary of Josaphat, seems to be the large ruin of *Yerzeh* (Sheet XII).

*Kefreachab*, Cartulary of Holy Sepulchre No. 144, and No. 54, is clearly *Kefr 'Akâb* (Sheet XVII).

*Lahemedie*, a Venetian casale in the country, near Tyre, probably *el Hammedîgeh* (Sheet I).

*Lecara*, mentioned with Iebul in Lower Galilee, is clearly the ruin *Kâra*, near *Yebla*.

*Laremedie*, a Venetian casale, seems to be the modern *Rumeidîgeh* (Sheet I).

*Maledoin*, the name of the castle on the Jericho road (Sheet XVIII), is evidently a corruption of Militum. In the Onomasticon (see "Memoirs," vol. iii, p. 172) it is called Castellum Militum.

*Mangana*, a casale given to the Abbey of Mount Tabor in 1101 A.D. by Tancred, seems to be *Umm Jânieh*, on the Jordan (Sheet VI).

*Migedell*, a casale near Caco, in the Maritime plain, appears to be *Mejdel Yâba* (Sheet XIV).

*Meimes*, given to the Hospitallers by Hugh of St. Abraham, is no doubt the ruin *Mâmâs* (Sheet XXI).

*Melius*, a casale near Ascalon, given to the Knights Hospitallers in 1111 A.D., is perhaps the ruin *Melîta* (Sheet XX).

*Mirabel*, the celebrated castle, is, I believe, to be found in the Castle of Râs el 'Ain (Sheet XIII). The name may survive at *el Mirr*, close by.

*Moitana*, given to the Hospitallers in 1110 A.D., is perhaps the ruin *Muteiyen* (Sheet XIV).

*Montgisard*, near Ramleh, and south of Mirabel, mentioned by William of Tyre, xxi, 23, appears to me to be the Mound of Gezer, *Tell Jezar* (Sheet XVI).

*Quefrenabit*, belonging to John d'Ibelin, near Acre. The name probably survives in *Bîr Kefr Nebîd* (Sheet III).

*Roma*, a casale of the Cathedral of the Holy Sepulchre, apparently in the centre of the country near Ragaba (*Rujîb*), appears to be the ruin *el 'Ormeh* (Sheet XIV).

*Saarethe*, a casale given to the hospital by John d'Ibelin in 1256, seems perhaps to be the ruin *S'aîreh* (Sheet XVII); it ought to be towards the plain where Ibelin (Yebna) stood.

*Sabahiet*, a casale of the Holy Sepulchre Cathedral, is perhaps *'Ain Subieh* (Sheet XVII).

*Saka*, between the Kishon and Caphar Mada (Kefr Menda), is perhaps the ruin *S'as'a* (Sheet V).

*St. Elie*. In this case M. Rey seems to me in error. The place appears to be the present *Mar Elias*, which is mentioned in the "Citez de Jherusalem" as south of the City (*see* p. 41 of the Palestine Text Society's translation).

*Samarita*, or *Samaritano*, a casale of Caesarea. M. Rey suggests Zummarin, but perhaps the place intended is the old *Castrum Samaritorum*, now *Kefr es Samîr* (Sheet V).

*Saphe*, belonging to N. Dame de Josaphat in 1130, in the territory of Nâblus, seems to be *Suffa* (Sheet XVII).

*Sapharoria*, Cartulary of Holy Sepulchre, No. 133, seems to be the ruin of *Kefr Urieh* (Sheet XVII).

*Terfalsa*, a casale of the Royal domain near Tyre, is evidently *Teir Fîlsieh* (Sheet II).

*Turbasaim*, Cartulary of Holy Sepulchre, Nos. 41, 142, near St. Gilles, seems to be the ancient Thormasia, now *Turmus 'Aya* (Sheet XIV).

*Zenum*, Cartulary of Holy Sepulchre, Nos. 29, 53, 54, 144, seems to be *Deir Yesîn* (Sheet XVII).

Considering how thoroughly this nomenclature has been examined by various scholars, the above list of more than sixty places is a substantial addition in the total of six hundred. Except in the cases here noticed, Rey's identifications appear to be satisfactory, and the places are found on the Survey map. In the present paper I have only noticed new identifications, with one or two exceptions, and have not repeated the identifications which are already discussed in the "Memoirs."

If each of the these 600 casales contained 100 houses, as mentioned by William of Tyre, the population of a village in crusading days would have averaged about 500 souls, which is about the average of a modern Palestine village. This would give a population of 300,000 souls, which is about half the present population of Palestine, but although the various Cartularies give us many names in Galilee and west of the water-



shed, the regions further east and south are unnoticed, and the property described is that of public bodies not of the original fief-holding knights. The army alone is calculated to have consisted of some 20,000 to 25,000 men in all (see "Syrian Stone Lore," p. 428), and the population was probably at least equal to that of our own times.

It should be noticed that crusading ruins are mentioned in the "Memoirs" at a great many of the sites, which are included in the above-named lists.

C. R. C.

## THE NORMAN FIEFS IN PALESTINE.

By identification of the various towns in Palestine mentioned in Norman documents, it becomes possible to define the limits of the fiefs, and these I have now laid down on the Survey Map. The fief of Sagette (Sidon), including the Land of Schouf—now *Jebel Shûf*—lay beyond the limits of the Survey on the north, being bounded on the south by the Kasimîyeh gorge, but including the Merj 'Ayûn and the important castle of Belfort. South of this line the following were the divisions :—

(1.) *The Seigneurie of Tyre*, from the Kasimîyeh on the north to the Ladder of Tyre on the south, including the lower hills on the east to *Zubkîn*, *Reshkananîn*, *Baflei*, and *Nîha*.

(2.) *The Seigneurie of Toron*, held by the Courtney family, east of the last, and extending in a southern direction to *Harfeish*.

(3.) *The Seigneurie of Renier of Marun*, including *Marân er Râs* on the south-west, and the towns Mees (*Meis*), Belide (*Belûdeh*), Cades (*Kades*), and Chateau Neuf (*Hunîn*). It appears to have reached to the Jordan Valley.

(4.) *The Seigneurie of Montfort*, between (1) and (2), extended from Aithire (*Yûter*) on the north to Jeth (*Jett*) on the south. On the west it included Judyn (*Kul'at Jiddîn*), Zoenite (*Zueinîta*), and Tabaria (*Tibria*) reaching to the plains of Acre.

(5.) *The Seigneurie of St. George of Labeyne*, from *Beit Jenn* on the east to Gelon (*Jallûn*) on the west, and from Bucael (*el Buke'ah*) on the north to *Wâdy Halzân* on the south. St. George of Labeyne was the present *El B'aneh*, near which is the shrine of *El Khudr* (St. George).

(6.) *The Territory of Acre*, from the Ladder of Tyre to the Kishon, and extending from the sea to the mountains west of Caphar Mada and Zekanin (*Kefr Menda* and *Sukhnîn*).

(7.) *The Seigneurie of Cayphas* included Carmel and the sea shore almost to Chateau Pelerin.

(8.) *The Seigneurie of Caymont*, a small fief round Tell Keimûn.

(9.) *The Prince of Galilee* occupied the rest of Upper Galilee and all the plain of Esdraelon to Petit Gerin (*Jenin*). On the south-east the border ran from Le Grand Gerin (*Zer'in*) by Lecara (*Kâra*), Hubelet

(*Yebla*), and Gebul (*Jabbûl*), having the Valley of Jezreel in the next fief. The borders of the Seigneur of Tiberias in this fief I am not able to define.

(10.) *The Seigneurie of Bessan* included the Jezreel Valley and Jordan Valley, perhaps as far as *Tell er Ridhyhah*, where the Beisan plain ends.

(11.) *The Seigneurie of Cesarea* included the Sharon plain to the River of Roche Taillie (*Nahr el Fâlik*). On the east it ran to the low hills including Hatil (*Attîl*) and Allar (*Ellâr*), Caphet (*Keffa*), Pharaon (*Fer'on*), and Phardesie (*Furdisia*).

(12.) *The Seigneurie of Arsur*, south of the last, and as far south as the Arsur river (*Nahr el 'Auja*); extended on the east to include Largieous (*Jeigûs*).

(13.) *The Seigneurie of Naples* included the Samaritan hills as far south as Kafarhone (*Kefr'Ana*) and Val de Curs (*Ain Sinia*).

(14.) *The Seigneurie of Jaffa and Ascalon* belonged to the famous Seigneurs of Ibelin (*Yebnî*). It extended south from the River of Arsur to Gaza, and on the east to Betenoble (*Beit Nâba*), Huldres (*Khuldah*), Blanche Garde (*Tell es Sâfi*), Zeite (*Zeita*), and Agelin (*Ajlân*).

(15.) *The Seigneurie of Darum*, round *Deir el Belah*.

(16.) *The Seigneurie of St. Abraham* included the Hebron hills from *Beit Jibrîn* eastward. On the north it seems to have extended to Jama-  
vara (*Jemrârah*) and Meimes (*Mâmâs*).

(17.) *The Royal Domain* was between St. Abraham and Naples, including the Jerusalem hills and Jericho Valley. A large proportion of the villages in this region were given by successive kings to the Church of the Holy Sepulchre.

(18.) *Oultre Jourdain*, the great fief of Renaud of Chatillon, included Gilead and Moab.

(19.) *The Land of Suhete* was the Jaulân up to Bânias.

A few notes may be added.

There were three bridges over Jordan in the 12th century, viz. :—

(1) The bridge of Chastelet = *Jisr Benât Y'akâb*.

(2) The bridge of Sennabra = *Jisr es Sidd*, just south of the Sea of Galilee, where the ruins of Sinnabris (*Sin-en-nâbra*) still exist.

(3) The bridge of Judaire = *Jisr el Mujâmi'a*.

The *Jisr ed Dâmiéh* is also probably a Crusading structure, but I do not know its Crusading name.

The *Lake of Castorie* was in the plain near Arsuf. It seems clearly to be the present *Bahret Katurieh* of the Survey.

M. Rey, in 1883, promised a Crusading map of Palestine. I do not know if this has yet appeared. If so, the fiefs will probably be shown much as above, since many of the towns noticed in this paper were identified by him.

## THE VANNIC LANGUAGE.

SEVERAL writers, following Dr. Sayce, have supposed that the language of the Vannic inscriptions in Armenia would be found to be the same as that of the Hittites. This seems to me unlikely, because the Vannic is an inflected tongue, whereas the Hittite is generally allowed to have been probably agglutinative.

Dr. Mordtmann supposes the Vannic to be an Aryan language, resembling Armenian, in which case it would not have any bearing on the Hittite. It appears to me probable that he is right, because out of the very few words of known sound as yet settled in Vannic a good proportion are similar to Armenian. Armenian is not a language in which phonetic decay has proceeded very far, as may be seen on comparing Armenian with other early Aryan languages. The Vannic also compares not only with Armenian, but with the monumental Persian, the Zend, and the Sanskrit, and the comparisons extend to pronouns and other parts of speech which are, as a rule, more constant than nouns and verbs. The following instances may be of value as showing what is meant, especially as regards terminations :—

Vannic —

- si*, nominative ; old Persian -*sa*.
- i*, genitive, sing. ; Armenian -*i*.
- n*, accusative, sing. ; Armenian -*n*.
- naue*, possessive ; Armenian -*an*.
- pari*, locative ; old Persian -*pāra*, "towards."
- ki*, participle ; the common Aryan -*ka*, adjectival.
- li*, gerund ; Armenian -*li*, gerund.
- ni*, third person pl. ; Armenian -*n*, third person pl.
- n*, for ordinals ; Armenian -*n*, ordinal.

Pronouns and particles seem to show the same :—

Vannic—

- ies*, "I" ; Armenian *Ês*, "I."
- ini*, "this" ; Armenian *ain*.
- isti*, "this" ; Armenian *asti* ; Latin *Iste*.
- para*, "out of" ; old Persian *para*, "away."
- cha*, "this" ; old Persian *hauva*, "this."
- uda*, "that" ; old Persian *aita* ; Armenian *ta*.
- ui*, "and" ; Armenian *yev*, "and."
- ali*, "and" ; Armenian *aylyev*, "or."

The pronouns being among the most unvarying parts of speech, the comparison is of some value, but nouns and verbs may also be compared :—

Vannic—

*are*, "men"; Armenian *ayr*, "man."

*alkhe*, "inhabitants"; Armenian *elk*, "race."

*Ardis*, "light"; Aryan √AR, "burn"; Armenian *aryer*, "sun."

*a*, "sacrifice"; old Persian *aya*, "sacrifice."

*asis*, "house"; Sanskrit *vasas*, "house."

*asi*, "cavalry"; Sanskrit *asva*, "horse."

*ehuri*, "Lord"; Zend *ahura*; old Persian *aur*, "Lord."

*esi*, "Law"; Sanskrit *yos*; Latin *jus*, "Law."

*ip*, "inundation"; Sanskrit *ap*; old Persian *api*, "water."

*kha*, "to possess"; Aryan √GI, "to gain."

*khar*, "to cut"; Sanskrit *kri*; Greek *keiro*, "cut."

*khin*, "son"; Aryan √GAN, "to beget"; whence English *kin*.

*Sal*, "year"; Persian *Sal*, "year."

*tumeni*, "village"; old Persian *tauma*, "house"; Armenian *dawn*.

*paru*, "to carry off"; Aryan √BHAR, "to carry."

*Zadu*, "to build"; Zend *Zad*, "a building."

The names of the Vannic kings do not, as has been asserted, present comparisons with Hittite names. On the contrary, in some cases they seem to be of an Aryan type—*e.g.*, Argestis. The thirty-three instances above given, together with the inflectional character of the Vannic, and the use of at least one preposition, *pari* (Greek *para*), seem to me to support Dr. Mordtmann's views as to the Vannic, and to agree with the statement of Herodotus, that the Armenians were of Phrygian origin—the Phrygians being pretty clearly Aryan. The Vannic texts, however, are not older than the 9th century, B.C., whereas the Hittite texts are older than perhaps the 17th century, B.C., or at least than the 14th century.

C. R. C.

## NOTE ON THE HOLY SEPULCHRE.

THE description of a Jewish tomb near the site of Calvary, published in 1881, seems to have been misunderstood. The Bishop of Cashel last year published a small pamphlet pointing to a tomb under the Rock of Jeremiah's Grotto as being that which was intended, and was told by a Greek that General Gordon believed this to be the true site. As far as I have heard, General Gordon had no special view on the subject, though he accepted the site which I proposed for Calvary in 1878.

The tomb to which the Bishop refers I visited when first partially excavated in 1873. It is fully described in the Jerusalem volume of the "Memoirs." I found on the east wall a Latin cross with A and Ω, one either side. I feel little doubt that it is a Crusading tomb connected with the adjoining Asnerie, which I then identified. The only Jewish tomb

as yet known in the vicinity is further west, on the other side of the road, as described in the same Memoir. I fear, from what I hear, that visitors are being misled by natives, who point to antiquities on their property as the places mentioned by explorers.

C. R. C.

## NOTE ON "THE REMAINS OF OLD WALL OUTSIDE THE PRESENT NORTH WALL OF JERUSALEM."

HERR SCHICK (in the *Quarterly Statement* for April, 1889, p. 63) describes remains of an ancient wall discovered beneath the surface along the line of the city wall north of Jerusalem, and west of the Damascus Gate, outside the present wall.

During the earlier years (from 1846 to about 1854) of our residence in Jerusalem, there was, exactly on the line traced by Herr Schick, a row of ancient stones above ground, not quite continuous, but at very short intervals, which we held to indicate the line of the ancient wall (probably the second of Josephus, perhaps at the part broken in Manasseh's reign). Some of these stones were large—about  $3\frac{1}{2}$  feet high by 4 to 5 feet long. (I have not any measurements and write from memory.)

All were of the kind found in the older masonry of the city walls. Several had a shallow marginal draft, the margin of the largest blocks was deep and bold. Two or three very fine corner-stones lay at the west angle in the wall, marked red by Herr Schick. These stones were of hard, compact white limestone, without polish, but not much weathered. When Jerusalem became more visited, and when foreigners settled and began to erect large buildings, these venerable stones gradually disappeared, they were taken to be cut up and sold for use in modern buildings. The same fate befell the line of similar stones to the left of the path leading from the north-west corner of Jerusalem, in the direction of the ash-heaps north of the olive grove. We also were sorrowful witnesses of the gradual destruction of the beautiful sarcophagus (without lid) which lay outside the city wall, a little to the west of Herod's Gate, which the then authorities refused to have removed to a place of safety. This sarcophagus was carved out of a block of very hard white limestone, and was ornamented on its sides with wreaths of flowers in high relief. Bit by bit it disappeared, broken by idle lads in sheer mischief, and by relic hunters. It was of small size.

At the time of which I speak there were also fragments of ancient building-stones on either side, north and south, outside of the Damascus Gate (before the rubbish heaps there were made), which led us to think that here might be found two towers, perhaps the "Women's Towers" of Josephus.

Our then Prussian Consul, the learned Dr. G. E. Schultz, probably marked some of these remains on the map accompanying his "Vorlesung," but of this I cannot be sure, not having by me a copy thereof.

E. A. FINX.

## NEHEMIAH'S WALL.

In his paper in the April *Quarterly Statement*, Mr. St. Clair comes to the conclusion that the sepulchres of David were on the western side of Ophel (so-called), north of the Virgin's Fount. To me it seems clear that really they were on its eastern side, south of that Fount. Indeed, I cannot see the slightest ground for doubt on this point. Yet, as these contrary opinions perplex some readers of the *Quarterly Statement* who are interested in Jerusalem topography, it is desirable at once to test the accuracy of Mr. St. Clair's theory.

The basis he takes is unfortunately unsound. He accepts as correct Sir Charles Warren's site for Akra on the northern side of the Upper City, without attempting to meet even one of the ten or rather twelve points in Josephus, which both require Akra to be on Ophel, east of the Upper City, and render impossible any northern site (*Quarterly Statement*, 1886, 26; 1888, 108). Mr. St. Clair next contradicts himself in first stating that the causeway joined Akra to the eastern hill, and then on his plan making it join the Upper City to that hill. It cannot have joined both, since a valley separated (Jos. Wars, v, iv, 1) the Upper City from Akra. The plan is right, agreeing with Josephus, who makes the causeway part of the first wall. Lastly, Mr. St. Clair, in making his Lower City to be of a *crescent form*, agrees, not with Josephus, but only with his mistranslators, since whatever ἀμφίκυρτος may mean, it certainly does not mean crescent-shaped (Wars, *id.*).

I have pointed out these errors by way of preface in order that the reader may be the more convinced that Mr. St. Clair's theory is not to be accepted without a sifting examination, and that he may not be carried away by the high-handed manner in which the theory in question is developed in spite of Josephus, existing remains, and Biblical evidence.

Mr. St. Clair seems willing to allow that Nehemiah's Wall may have included the towers at the south-west corner, discovered by Mr. Maudslay. It *must* have done so if we accept the statement of Josephus (Wars, v, iv, 2), that the first wall was built by the kings; and Mr. St. Clair would hardly, I imagine, dispute its doing so, if he had to admit that the city wall came near to the Pool of Siloam. As to this point we learn from Josephus (*id.*) that (1) "The wall bending above the Fountain of Siloam, *thence* again," &c. This *thence* must mean *from Siloam*, since it can only refer to the words immediately preceding it. Therefore the wall went near to the Pool of Siloam. (2) Simon (Wars, v, vi, 1) "held as much of the old wall as bent from Siloam . . . also that fountain" (Siloam). Thus, obviously, the fountain was, if not within, yet commanded by the wall. Be it noted that Whiston's *inaccurate* translation in Wars, v, ix, 4 ("Siloam, as well as all the *other* springs without the city"), by arbitrarily inserting *other* has given rise to the common error that the Romans had access to the fountain of Siloam, and that therefore it was without the city. Thrupp

points out that the words of Josephus do not imply any such thing. (3) "The Romans drove the Jews out of the Lower City and set all on fire as far as Siloam" (vi, vii, 2). If Mr. St. Clair desires to appeal to Josephus (as he does on page 91), these passages afford evidence enough to show that the wall went near to the Pool of Siloam. The Jewish historian, however, often errs. Therefore, I will not press his evidence in support of my two main objections (page 38), that the wall passed close to the Virgin's Fount, and sufficiently near to the Pool of Siloam to defend it.

Unconsciously Mr. St. Clair gives on his plan the strongest possible refutation of his own theory, inasmuch as it shows (1) the winding aqueduct cut through Ophel from the Virgin's Fount to the Pool of Siloam, and (2) the secret passage above that Fount discovered by Sir Charles Warren.

But some one will ask, how do these remains refute the theory in question? The simple answer is that by leaving the Fount 500 feet and the Pool 1,200 feet outside Jerusalem, Mr. St. Clair makes both the aqueduct and the passage to be but mere exhibitions of the folly not only of the original constructors, but also of those who used the passage as well as of those who executed the famous inscription found in the aqueduct. For who with immense labour would hew a tunnel 1,700 feet long, through a rocky hill, to convey water from one point to another, when it could more readily be conducted along the side of the hill, and already was so conducted, as Mr. Schick's discovery proves (*Quarterly Statement*, 1889, 35), at the very time the tunnel was made? Who, again, without a reason, would cut through rock an underground staircase, with a shaft forming a draw-well; and who, further, after the contrivance was finished, would care to use it, when it was easier and far more pleasant to go down the hill under the open sky and draw the water direct from the fountain itself? Who, lastly, would care to sit in a cramped position in order to engrave on the rock an account of a perfectly useless undertaking? Yet one and all of these incredible suppositions must be admitted if Mr. St. Clair's novel line for the wall is to be adopted.

It is far better to suppose that the ancients acted with a reason than without one, though it may need some thought to decide what that reason was.

Happily Dr. Robinson's penetration discerned the object of the aqueduct, long before the discovery of the staircase confirmed the correctness of his conjecture. He says it seems to have been "important to carry the water from one point to the other, in such a way that it could not be cut off by a besieging army. This purpose would have been futile had either of these points lain without the fortification," or been undefended.

This judicious remark was supported by Sir Charles Warren's discovery of a staircase (opening southwards on Ophel), by which those within the city would have access to the waters of the Virgin's Fount



without going outside the fortifications (*see* "Recovery of Jerusalem," 238).

There is hardly need to say more against the proposed line of wall; yet the clearest proof has still to be adduced, namely the *direct* Biblical evidence of the aqueduct being made, and the indirect evidence of the staircase being used, though for a purpose very different from what its authors ever intended.

Patient research has proved Gihon to be the Virgin's Fount. We learn from 2 Chron. xxxiii., 14, that Manasseh built an outer wall to the city of David on the west side of Gihon. Surely here we have a wall built on Ophel close to the Virgin's Fount. Previously (xxxii., 30) Hezekiah had "stopped the upper spring of the waters of Gihon and brought them straight down (or by an underground way—*Variorum Bible*) on the west side (or to the west side) of the city of David." Why! Here the very construction of the aqueduct is recorded, while the reason of Hezekiah's great water-works is given in verse 4. "They stopped all the fountains, saying—why should the kings of Assyria come and find much water?"

I have pointed out (1878, 129, 184) that the staircase or secret passage proved invaluable to the Jebusites, until Joab climbing the shaft with the help or connivance of Aramah, got up through the *Tzinnor* or gutter (as the passage in whole or part is called in 2 Saml. v, 8) and so captured the castle of Zion. That the *gutter* was this shaft, seemed (1884, 175) as absurd to Prof. Sayce, as that it was a *waterfall* still seems to me. No addition indeed to Jerusalem could possibly be more picturesque than a cataract feathered with maidenhair fern, but criticism must interpose, Where is the waterfall now, and whence flowed the water then?

On the other hand, in defence of my *shaft* (or *passage*) I can urge that Kennicott thus explained the Hebrew word a hundred years ago, and that Sir Charles Warren discovered the passage ten years before it was proved that the castle of the Jebusites was on Ophel so called. That this was its site is a fact; that a passage was made to the spring gives the reason for the fact. A strong prejudice exists against Kennicott's solution, but without the least reason. A similar passage is mentioned by Polybius as existing at Rabboth Ammon (1878, 190) in B.C. 218, and is probably alluded to by Josephus (Ant. vii, vii, 8) as existing in David's time. In *Quarterly Statement*, 1881, 256, mention is made of a like contrivance at Gibeon. If further refutation of Mr. St. Clair's theory is desired, let me briefly show how it falls to pieces under the weight of its own inconsistencies.

1. It is maintained that the four turnings and one corner named in Neh. iii, 19-25, coincide with those along his line of wall. To attain this harmony, the one and same turning in verses 19-20 has to count as two (p. 93). Again the first salient angle (a very prominent corner on his plan) south of the causeway has nothing to correspond to it in Neh. iii. As a plea for its absence it is urged that the Ephraim Gate is not named in Neh. iii, 6-8, but I have pointed out (1879, 177) that "the throne of



the governor" (justice being administered at the gate) marks the required spot. Lastly, while Binnui (v. 24) repaired *unto* the turning of the wall and *unto* the corner," Mr. St. Clair's wall on his plan passes *over against* (in sight of, in front of, *see* 16), and does not come *to* (*i.e.*, unto) either the turning or the corner.

2. The frequent expression *after him* in Neh. iii seems to me to mean that where the previous builder left off, the next began his work, as in verses 20, 21. But Nehemiah (v. 16) who repaired *after* Shallun instead of beginning where Shallun left off, actually begins where Shallun, himself had begun. This predicament arises from Mr. St. Clair's predetermination to have a loop line of wall.

3. The Pool of Siloam (p. 92) is made to lend its name to the transverse wall 1,500 feet away from it. Why was not the wall rather billeted on the King's Pool, *alias* the Pool that was made (but can the two be identical?) on Mr. St. Clair's plan only 300 feet distant, instead of having to beg its name from Siloam.

4. Finally the loop line of wall, the chief characteristic of the theory, is utterly inadmissible. Surely, among the thousands of Jews at Jerusalem who had no superfluous taste for heavy burdens (Neh. iv, 10), some one at least must have been intelligent and sharp enough to perceive that it was only frittering away their strength to fortify an inner loop wall, four times as long as the transverse wall, and requiring all the workers from v. 16 to the prison in v. 25, instead of concentrating their combined energies on making the latter as strong as possible. Mr. St. Clair says (p. 95): "That the transverse wall was no protection by itself, there being an easy approach up the valley." But if a wall across the bed of a valley must necessarily be weak, much more weak must the loop wall have been, since Mr. St. Clair is by his theory (p. 91) forced to draw it in one part actually *along the valley-bed*. Could any other line possibly be weaker? On the position of a wall a workman's wit is a safer guide than literary talent. An unnecessary wall along the bottom of a valley exposes the unsoundness of Mr. St. Clair's theory (who rightly takes the south-west hill (*gibeah*) to be part of Jerusalem), just as much as the notion of a wall at the foot of a hill (1883, 215, plan) being a defence against besiegers on that hill, exposes the weakness of Prof. Sayce's theory that the south-west hill was no part of Jerusalem, and that consequently the hill (*gibeah*) of Jerusalem was the same as the Mount (*har*) of Zion. What fun the Chaldæans would have had in rolling big stones downhill against a wall so remarkably illplaced.

W. F. BIRCH.

## THE ACCADIAN WORD FOR KING.

I SEE that in the last number of the *Quarterly Statement*, Major Conder repeats the erroneous statement that *ku* in Accado-Sumerian signified "king." Let me once more assure him that it did nothing of the kind, and that he must have misunderstood Mr. Pinches and Mr. Bertin if he believes that they think otherwise. There is, it is true, a character which may be read *uk*, and which denotes "king," but the reading is probably something quite different, and *uk* is not *ku*.

Mr. Budge does not profess to know Amardian, or "Medic," and in the passage to which Major Conder alludes he was merely reproducing Morris's "makeshift" reading of the word for "king." The correct reading is *anin* or *unan*; the word *ko* does not exist.

After this I hope we shall hear no more of a *ku* or *ko* "king."

A. H. SAYCE.

## THE TELL ES-SALAHYEH MONUMENT.

THIS monument was first noticed by the late Rev. J. L. Porter, D.D., and described by him in his "Five Years in Damascus." It afterwards disappeared, and, when I went out to Palestine in 1865, I was instructed by the Committee to search for it and make excavations in the Tell. The excavations resulted in the re-discovery of the slab, which was afterwards sent to England by the late Mr. Rogers, then H.M. Consul at Damascus, and is now with the exhibit of the Palestine Exploration Fund in the South Kensington Museum. The circumstances are detailed in my report to the Committee, printed in 1866.

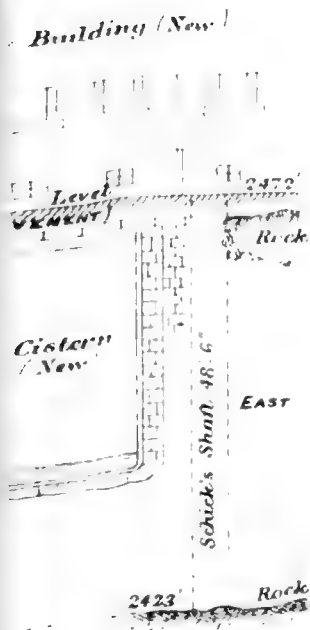
C. W. W

# PLANS AND SECTIONS OF THE LARGE CISTERN

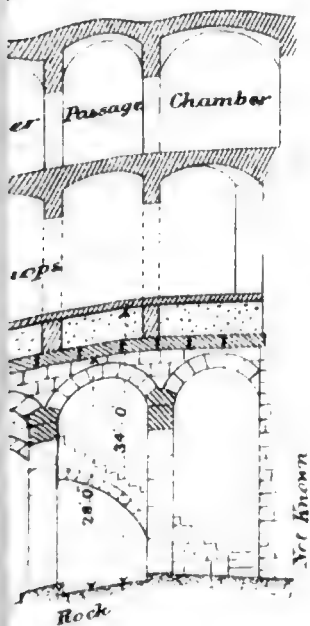
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See Quarterly Statement, July 1889,

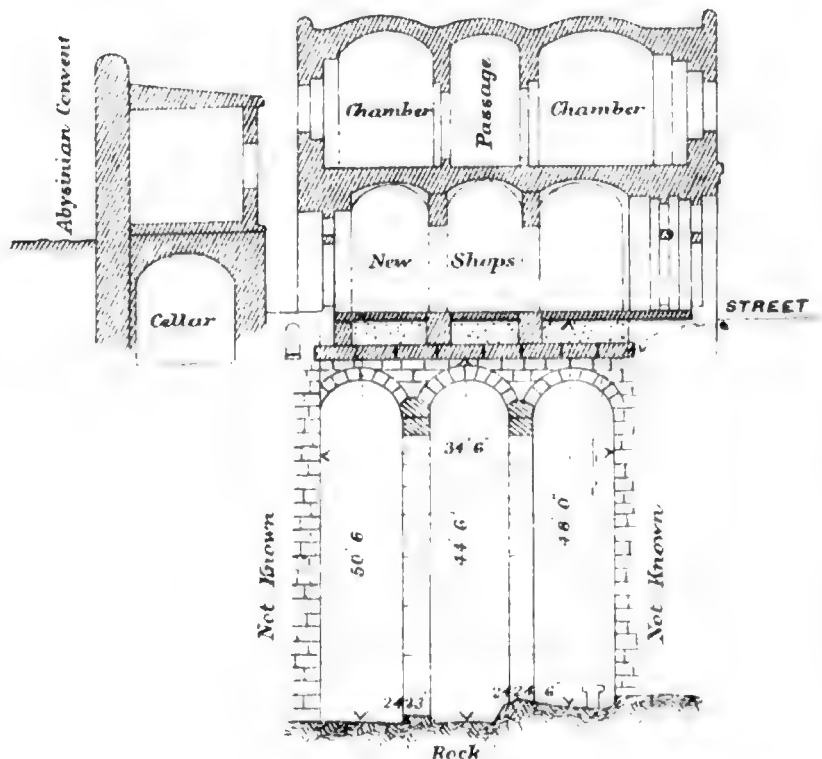
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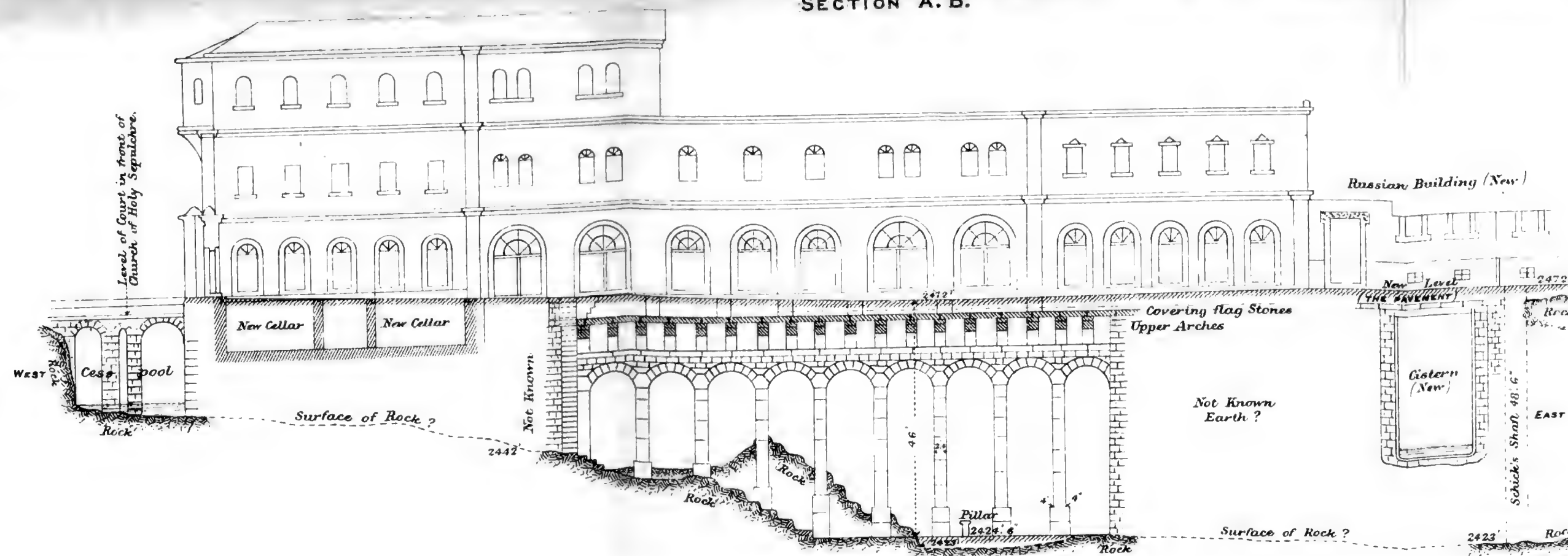
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## PLANS AND SECTIONS OF THE LARGE CISTERN

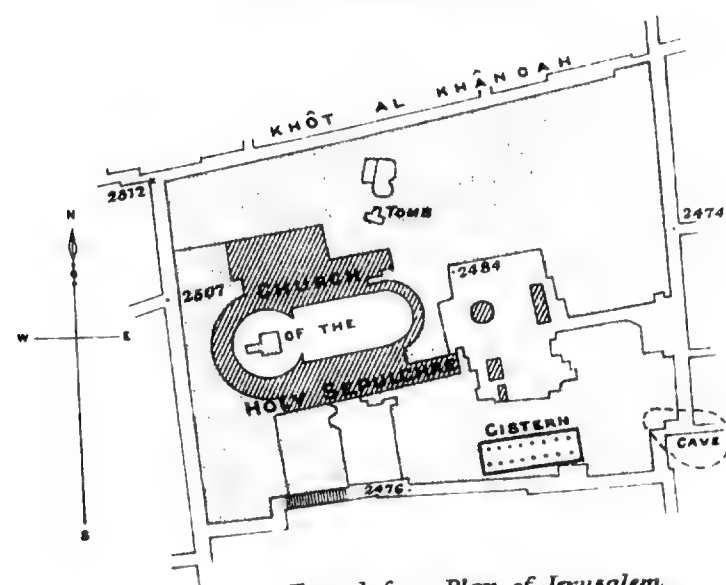
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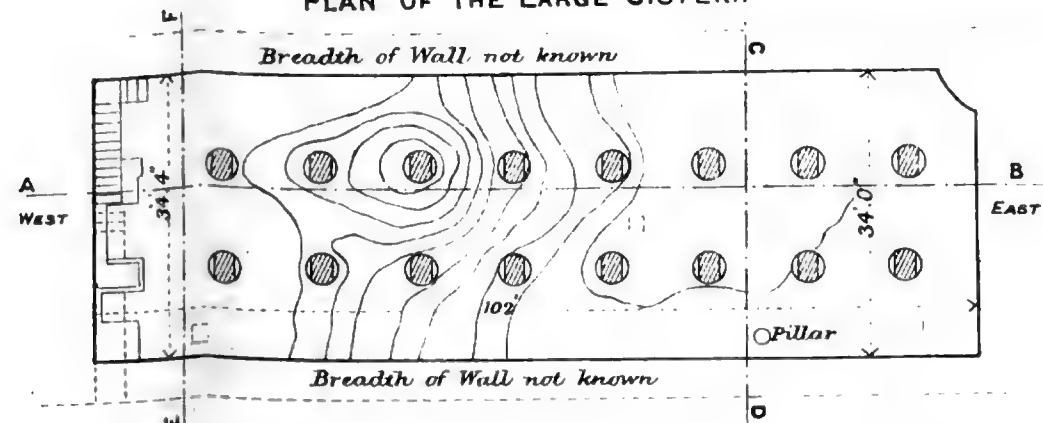
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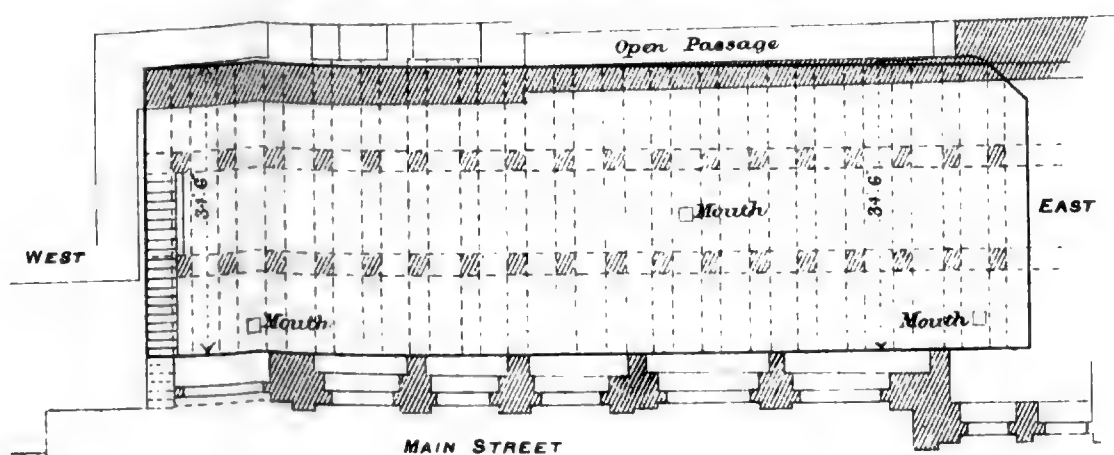
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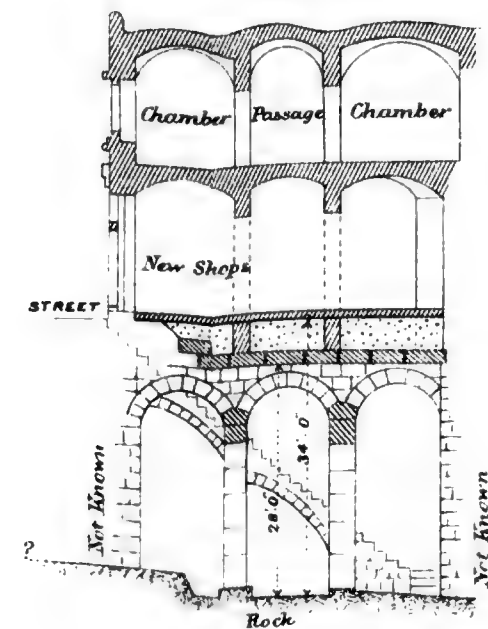
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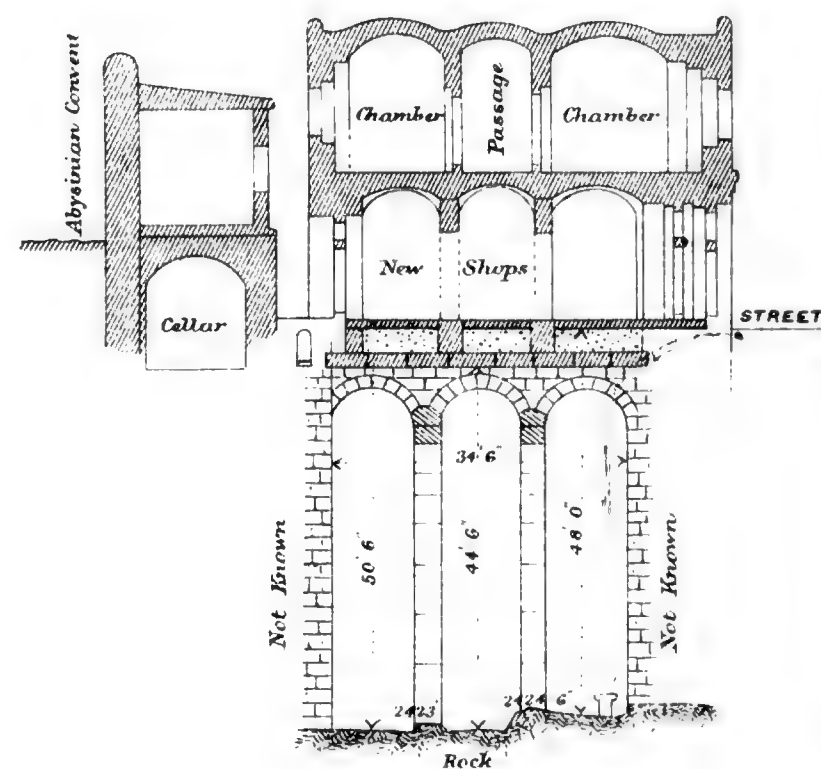
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